BRILL'S STUDIES IN INTELLECTUAL HISTORY

General Editor

A.J. VANDERJAGT, University of Groningen

Editorial Board

M. COLISH, Oberlin College
J.I. ISRAEL, University College, London
J.D. NORTH, University of Groningen
H.A. OBERMAN, University of Arizona, Tucson
R.H. POPKIN, Washington University, St. Louis-UCLA

VOLUME 57

THEOLOGY AND MUSIC AT THE EARLY UNIVERSITY

The Case of Robert Grosseteste and Anonymous IV

BY

NANCY VAN DEUSEN

E.J. BRILL
LEIDEN · NEW YORK · KÖLN
1995

The paper in this book meets the guidelines for permanence and durability of the Committee on Production Guidelines for Book Longevity of the Council on Library Resources.

Library of Congress Cataloging-in-Publication Data

94–34149
CIP

Die Deutsche Bibliothek – CIP-Einheitsaufnahme

Deusen, Nancy van:
Theology and music at the early university : the case of Robert Grosseteste and Anonymous IV / by Nancy van Deusen. – Leiden ; New York ; Köln : Brill, 1994
(Brill's studies in intellectual history ; Vol. 57)
ISBN 90–04–10059–8
NE: GT

ISSN 0920-8607
ISBN 90 04 10059 8

© Copyright 1995 by E.J. Brill, Leiden, The Netherlands

All rights reserved. No part of this publication may be reproduced, translated, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without prior written permission from the publisher.

Authorization to photocopy items for internal or personal use is granted by E.J. Brill provided that the appropriate fees are paid directly to The Copyright Clearance Center, 222 Rosewood Drive, Suite 910 Danvers MA 01923, USA. Fees are subject to change.

PRINTED IN THE NETHERLANDS

CONTENTS

Acknowledgments vii

Introduction ix
I. Thirteenth-Century Motion Theories and Their Musical Applications: Robert Grosseteste and Anonymous IV 1
II. *Ubi Lex*? Robert Grosseteste's Discussion of Law, Letter, and Time and its Musical Exemplification 19
III. *Ductus*, *Tractus*, *Conductus*: The Intellectual Context of a Musical Genre 37
IV. Change in a Concept of "Mode" 54
V. Grosseteste's Concept of *Figura* and its Application to Music Notation 76
VI. *Operatio*: Towards a Theory of Performance in Thirteenth-Century Intellectual Culture 99
VII. *Composite Harmony*: An Aspect of the Conceptual Background to the Problem 113
VIII. A Theory of Composition and its Influence 127
IX. *Opus*: A Conception of the Musical Work 146
X. *Firmamentum* and Motet: A Theological Basis for a Musical Genre 161
XI. *Planus*, *cantus planus*: The Theological Background of a Significant Concept 177
XII. The Musical Exemplification of Quadrivial Pursuits: The Intellectual Relationship between Robert Grosseteste and "Anonymous IV" 188
XIII. Conclusions 205

Abbreviations of Works Cited 211
Bibliography 212
Index 219

ACKNOWLEDGMENTS

This book was begun during a study period in a most conducive atmosphere. I had been invited as a research fellow by the University of New England, Armidale, New South Wales, Australia. Each week I gave a seminar, and, since it was Friday, we—students, post-doctoral fellows, and faculty— discussed the topic I had presented all afternoon. Most of the other faculty members were specialists in ethnomusicology, and I began to be more keenly aware, especially in conversation with the Australian aboriginal music specialist, Professor Catherine J. Ellis, of the format of basic principles. I am especially thankful to her for her penetrating questions, her patience in discussion, her own intellectual development within her field. She articulated to me the gaping expanse separating a "Western" sense of logical progression, often unconsciously accepted, and what she had encountered during years of sensitive, creatively open study of the music and spiritual culture of Australian aboriginal musicians.

One day she asked me, what do you really think a paradox is? It was through time, questioning, and dialogue with Cath Ellis that I realized that basic analytical tools that helped me daily in my work, and which I took for granted, were identified, discussed, expounded, tested, and incorporated into the routine of intellectual activity during the early thirteenth century. This book concerns these tools.

The individual chapters were given as papers throughout the world, at Symposia for the International Musicological Society in Melbourne, and Osaka, and at its meeting in Madrid, 1991; at the universities of British Columbia, California (Berkeley, Davis, Los Angeles, Riverside), Dayton, Iowa, Michigan, New Mexico, Southern California, Stanford, Toronto, and Western Michigan, at California State University, Northridge, and The Claremont Graduate School, at annual meetings of the American Musicological Society, the Medieval Academy of America, the Medieval Association of the Pacific, the Medieval Institute of Western Michigan University, the Society for Ethnomusicology, and the *Cantus planus* meeting in Eger, Hungary, 1993. The ideas contained in this book have been exposed to many and diverse, albeit extremely knowledgeable, audiences, and I am grateful for all of the comments and reflections from the scholarly community that have, in many cases, shaped and refined details of my arguments.

Finally, I wish to thank Marcia L. Colish, Richard C. Dales, Joseph Goering, Edward Grant, Don Harrán, Sabine MacCormack, Thomas F. X. Noble, and the editors of, as well as the readers selected by Brill Press, for careful reading of my manuscript, in some cases, and, in all, for helpful

discussion of the concepts and formulations contained therein; Petra Meyer-Frazer for her editorial assistance and R. Chris Berry for help in the production of this book.

Nancy van Deusen,
Los Angeles, 1993

INTRODUCTION

At the climax of his masterful treatise, *De cessatione legalium*, Robert Grosseteste, in the early 1230's, wrote:

> But now consider the case of two conflicting scriptural texts, as if they were two pipes blown by the Holy Spirit. Are the two actually discordant, and no longer give forth a concord of discord? If by our own experience of the art of harmony, two pipes can be made to bring forth discord concordantly, and concord in discord, in much the same manner the Holy Spirit, possessing all virtue, power, and foresight, causes concord to resound in discord. Neither is it appropriate here to omit this type of artificial modulation when we consider the work of the Holy Spirit, as it fashions divinely modulated praise. Accordingly, not only does the musician (artifex) produce with the pipes a concordance, but also a concordant discord and a discordant concord, since the discordant concord is the art of harmonic modulation. All of this can be observed in the equivalent situation of musical consonance, that is, the fifth, the fourth, and the unison...[1]

The passage is of great importance for three reasons. It occurs in a treatise, which, more than any of Grosseteste's other writings, with the exception of his commentary on Aristotle's *Posterior Analytics*, exerted a profound influence.[2] Further, the passage cited is crucial to the treatise,

---

[1]*De cessatione legalium*, ed. Richard C. Dales and Edward B. King (*Auctores Britannici medii aevi*, VII, London, 1986), p. 164f: Sed numquid inter hos duos scriptores sacros, inter has duas Spiritus Sancti fistulas est vere discordia discors et non magis discordia concors? Si periti artis armonice faciunt per artem duas fistulas concorditer discordare et discordanter concordare, multo verisimilius est Spiritum Sanctum, artificem omnium, omnem habentem virtutem et omnia prospicientem per has duas fistulas concordem resonare discordiam. Nec decet tantum artificem quantus est Spiritus Sanctus in modulatione divine laudis omittere genus aliquod artificiosi modulaminis. Non solum ergo per fistulas tales resonat ille artifex concordem concordiam, sed et concordem discordiam et discordem concordiam, cum discors concordia sit modulatio armonica artificiosa. Omnes enim preter equalitatem consonancie musice, ut diapason et diatessaron et diapente, sunt discordes concordie sed, sicut accidit auditui gravi corporali duabus fistulis discordanter concordantibus, discordiam esse manifestam et concordiam latentem, sic accidit et duro auditui mentis nostre harum spiritualium fistularum discordiam esse patentem, latente que subest temperata concordia. Manifesta igitur resonat in hiis vocibus discordia: legalia post Christum nulli sunt observanda; legalia post Christum aliquamdiu sunt Iudeis observanda. Concordia autem si est in hiis, sicut verisimiliter apparet esse, non sic est evidens sed latentem, oportet perscrutabilius investigare. Et si forte non in omnibus et ubique possimus eorum patentes discordias ad concordiam latentem revocare, debemus tamen nichilominus hoc facere ubicumque fuerit hoc nobis possibile. Et forte non erit possibile in omnibus, quia sicut spiritus prophetalis non semper presto erat prophetis, sic forte Spiritus Sanctus non omnia et semper dictabat que isti duo sancti scribebant, sed eos reliquit aliquando propriis vocibus ut ex discordia proveniret nobis aliquis utilis fructus.

[2]See the introduction to *De cessatione legalium*, ed. Dales and King, ix. There are nineteen extant copies of the treatise. Oxford, Bodleian Library Ms lat. th. C. 17, was copied

presenting a point that is essential to Grosseteste's argumentation, namely, that conflicting, contrary lines of thought, presented in scripture, could, by a process of reflection with skill, be shown to be consonant. Another way of putting it, with an additional change in emphasis, was that discord could be latent concord. An additional reason for the importance of the passage is that it shows that Grosseteste clearly considered music to be a direct analogy—or equivalence—to this important, in some respects, unfamiliar concept. Grosseteste, in this work of profound theological influence, presenting an issue crucial to the Christian faith, sets up an intellectual construct and exemplifies it in a musical example.

Richard Southern has recently pointed out that, to his way of thinking, concord, expressed in this manner, as containing both concord and its opposite, was Robert Grosseteste's own, original concept.[3] Furthermore, this concept of concord as a *composite* shows Grosseteste's understanding of, and sensitivity to music, and its potential for providing an analogical system for new, unaccustomed philosophical ideas. What Southern does not mention, in his perceptive remarks concerning Grosseteste's musicality, is that the particular example Grosseteste cites, that of composite, simultaneous harmonic sounding of two potentially dissonant tones—indeed Grosseteste's entire conceptualization of consonance and dissonance—would have been impossible without concurrent developments in thirteenth-century musical style. The two—philosophical-theological idea, and its exemplification in music—go hand in hand, mutually illuminating one another.

---

during Grosseteste's lifetime and contains his corrections, as well as his concordantial signs. The manuscript also includes the Genesis commentary, or *Hexaemeron* of Grosseteste, and the treatise, *De universo corporali et spirituali* of William of Auvergne (Bishop of Paris, 1228-1249). See list of manuscripts in ed. Dales and King, xvi-xxv).

[3]Richard Southern, *Robert Grosseteste: The Growth of an English Mind in Medieval Europe* (Oxford, 1986), p. 232. It is interesting to compare Grosseteste's above discussion with that of Augustine, concerning *harmonia* in *The City of God*: But what I have in mind is the rhythm of relationships, the *harmonia*, as the Greeks would say, whereby the whole body, inside and out, can be looked upon as a kind of organ with a music all its own. The beauty of the music no one has yet discovered, because no one has dared look for it. Nevertheless, if this total organic design could only be discerned, even in the seemingly ugly elements of the human viscera, there would be revealed to the soul so vanishing a beauty that no visible shapeliness of form that delights the eye—the mere minister of our mind—could be compared to it (*De civitate Dei* XXII, 24: trans. Gerald G. Walsh, SJ, Demetrius B. Zema, SJ, Grace Monahan, OSU, and Daniel J. Honan (New York, 1950, abridged version, p. 528) cf. Latin ed. Bernard Dombart and Alphonso Kalb (*CCSL*, XLVIII, Turnhout, 1955), p. 850: ...numeros tamen de quibus loquor, quibus coaptatio, quae armonia Graece dicitur... Augustine, at the climax of the work, when presenting a crucial concept, uses a musical example. For Grosseteste, the concept of *armonia/concord*, although he certainly quotes copiously from *De civitate Dei*, had another emphasis. Cf. as well, Stephan Kuttner, "Harmony from Dissonance. An Interpretation of Medieval Canon Law," in *The History of Ideas and Doctrines of Canon Law in the Middle Ages* (*Variorum Reprints*, London, 1980) pp. 1-16.

Southern has freshly opened up the case of Robert Grosseteste, questioning details of his life that have, without adequate evidence, been assumed. In many ways, Southern's work revived the field of Grosseteste research, citing unresolved questions concerning the chronology of his childhood and early career, attributions of works—particularly early ones—to Grosseteste as well as to other authors, the question of the theologian's influence, as well as the important consideration of his position relative to the past, specifically within English intellectual life of the thirteenth century. There have been previous hints at Grosseteste's musicality.[4] Southern has clearly drawn attention to the fact that, at the very least, Grosseteste was a person gifted with an ability to appreciate and enjoy music, reflect upon its innermost nature, and, especially, to understand its specific propensities.[5]

Music, however, for Grosseteste, was far more than relaxing entertainment in later life, after a hard day's work as Bishop of Lincoln. Music was crucial to his understanding of the most revolutionary, demanding concepts of his time. Grosseteste's great treatises, such as *De cessatione legalium*; the *Hexaemeron*, a commentary on the creation account of the book of Genesis; an important, and one of the first commentaries on a portion of Aristotle's *Physica*; his short, pithy work on the ten commandments, *De decem mandatis*; and his separate, succinct tracts on the liberal arts and sound, set forth underlying principles that could, in all cases, be best comprehended by using the examples provided by the quadrivial discipline of music. These principles are few in number, but utterly basic in nature. They include concepts of material, harmony, reconciliation, and the trinity, for which Grosseteste cites Augustine, as well as many other authorities from the patristic and early medieval periods. He then reconciled these traditional concepts with his own external and internal intellectual milieus, coupling, for example, *material* with a concept of material composed of contrary, opposing parts tempered by a creator, traditional *armonia* with a concept of simultaneous harmony which included dissonance and consonance, a tradition of the trinity with a richer concept of unity in trinity-trinity in unity, that is, three distinct parts functioning together

---

[4]See, for example, Hermann Mueller, "Zur Musikauffassung des Mittelalters" in *Festschrift Hermann Kretzschmar zum 70. Geburtstage* (Leipzig, 1918), pp. 96-100, who, using Ludwig Baur's then-new edition of *De artibus liberalibus*, points out that Grosseteste, in discussing the liberal arts, concerns himself primarily with music, selecting *concordantia* as a chief consideration, and writing with perspicacity and technical knowledge concerning music. Mueller draws further attention to Grosseteste's ability to make connections between the arts of the quadrivium, for example, relating his own theory of light in *De generatione sonorum* to the generation of musical tones (see L. Baur ed., *Die philosophischen Werke Robert Grosseteste, Bischofs von Lincoln* [Muenster i. W. 1912]; *Die Philosophie des Robert Grosseteste* [Muenster i. W. 1917]).

[5]Southern, *Robert Grosseteste*, pp. 209, 232, 318.

within a totality. In every case, a traditional concept was reconciled with a totally new, fresh way of viewing the concept. This constitutes Grosseteste's contribution.

In using music as an example of essential concepts, Grosseteste, again, is working in a tradition that is primarily Augustinian. Indeed, both Augustine and Aristotle place a musical example on the right side of the proportion which contains, to their way of thinking, a major spiritual truth. Grosseteste does this as well, but brings an additional sensitivity into his reflection on the balance between both sides of an equation, namely, his affinity for the relationship of the *artes* and his interest in the university, which provided a showcase for demonstrating how the arts could function, both separately and together. We know this from his treatise on the liberal arts, but it is apparent, as well, in all of his treatises. In Grosseteste's writings and in the details of his earlier career that are available to us, we see a university professional, keenly aware of and interested in the connections between disciplines, as well as evidencing a vital interest in the profession of the university teacher as a calling, an office, a vocation. Grosseteste's view of himself as functioning not so much as an individual teacher in a school—as would, no doubt, have been the case in the twelfth century—but, rather, as a master within the university structure, affects not only his professional consciousness, but the direction and emphasis of his writing.[6]

Grosseteste's structure of learning is influenced by Aristotle's methodology of expounding upon and laying the ground work for philosophical principles in one treatise, giving examples of these principles within each of several separate disciplines in separate, discrete treatises. All disciplines must be taken into account, but nowhere does Aristotle make this connection, bringing together all of the principles considered important and relating them to all of their exemplifications.[7] This scheme of mutual dependency, as Grosseteste points out, unites and essentially integrates the university at its very core; it also differentiates the early thirteenth-century medieval university from a modern university, and separates the studies of music and theology from their counterparts today. Both modern disciplines

---

[6]Richard C. Dales and Servus Gieben, in the introduction to their edition of Grosseteste's *Hexaemeron*, summarize the situation of the early university as Grosseteste found and left it and point to the tremendous intellectual changes which took place in Grosseteste's lifetime from ca. 1175 to 1253: When Grosseteste was born, there were not yet any universities in Europe; the translating activity from Greek and Arabic into Latin was well under way but had as yet made virtually no impact on European thought; and Theology was far from being a systematic discipline. By the time he died in 1253, the great universities were at the height of their vigor; Greek and Arabic writings had been incorporated into the mainstream of European thought and Theology was a highly organized scientific discipline. Grosseteste played a major role in all three of these developments. (Robert Grosseteste, *Hexaemeron*, ed. Richard C. Dales, Servus Gieben, OFM Cap. [*Auctores Britannici medii aevi*, VI, London,. 1982], xi.)

[7]Amos Funkenstein, *Theology and the Scientific Imagination* (Princeton, 1986), p. 6.

are self-contained, separate unto themselves, and lead to professional niches. This is clearly not the case at the early university, especially for the discipline of music. Music writing, an exemplary discipline, depended upon philosophical principles and theological constructs for its rationality and significance, but, at the same time, music provided a substantial analogy, comprehensible to the eyes—in music notation—and to the ears in sound.

A conflict appears to exist in the thirteenth century between the close interrelationship and dependency of the arts on the one hand and the fact that each discipline is treated in a separate treatise. The relationship between the arts exists on the most basic level, that is, on the level of basic principles, and on the highest level, in terms of the goal of theology, toward which all of the other disciplines strove. The unity of the disciplines, then, consisted of their underlying basic principles and their end, i.e., an understanding of God and his nature to be ultimately attained by their study. The liberal arts were a means to an end, that of understanding theological truth. Placed between the foundation of philosophical principles and the goal of theology, the trivial arts communicated basic principles, whereas the quadrivial arts granted these same principles measurable objectivity in terms of particularity, diagram or conjoined linear relationships, and motion of bodies. Music had a unique position in that it exemplified all of the quadrivial arts.

This particular structure of principles conjoined with disciplines and the emerging discipline of theology accounts for the fact that music—or, for that matter, arithmetic, geometry, and physics—is not overtly related in the same treatise, either to the other three quadrivial disciplines, or to the basic principles these disciplines exemplify. The structure also accounts for the autonomous nature of each discipline. To discuss principles in detail in a treatise, for example, on music, would destroy the "disciplinary window" approach, by which the same principle is exemplified by each of the four disciplines, much as one would see a different aspect of the the same landscape from the perspective of four windows facing a view from four different sides. To put all of the disciplines together in one treatise would negate the reason for each discipline, as separate, autonomous, having a unique function and province, and presenting the same basic principle in a particular way. In order to understand the competence of each discipline, as well as to learn what could be expected from each discipline, the essentially medieval structure governing the division of information must be taken into account.

This structure is a distinctively medieval, not a modern university approach to learning, in which separate disciplines lead, ultimately, to vocational tracks. In a modern university structure containing schools and departments, specialties separate, hence connections to other specialties must be consciously made. Amongst the disciplines or departments of a

modern university, "interdisciplinary" implications must be carefully spelled out. Possessing this point of view, one expects that the ties that bind, for example, physics and music, or ultimately, music and theology, will be made clear in explicit, substantiated ways. But this does not occur in medieval writing. We look for it in vain. Connections outlined above were taken for granted, were inherent in the system taken over—already with a centuries-old tradition—and expanded within the intellectual culture that formed and also provided regulatory boundaries at the universities of Oxford and Paris in the first half of the thirteenth century.

Because both the intellectual milieu of the early university, as well as the structure of knowledge reflected in writing, have been, on a basic level, misunderstood, music's place and "ministry"—to use Grosseteste's own term—has also been misunderstood. The result of this is that very little by way of substantial evidence that music was part of a curriculum has been found.[8] The reason for this is that, generally speaking, all of the basic, most important concepts to be found in music writing have underlying theological constructs and are, to a great extent, incomprehensible without these constructs. On the other hand, musical exemplification clarifies these constructs, gives them a comprehensible perceptual format. There is a mutual, reciprocal influence; this is the reason that construct and exemplification were maintained in balanced dynamism as a tradition for many centuries. It is the purpose of this volume to bring specific theological constructs and the discussion of basic underlying principles and musical exemplification together in order to demonstrate their reciprocity.

Aware of this equivalence, Robert Grosseteste frequently brings the two sides of this proportional arrangement together. But there is another contemporaneous English writer on music who provides additional music examples in a self-contained music treatise. If not informed directly by the personality and writings of Grosseteste, this anonymous writer nevertheless completes the total picture of theological-philosophical discussion paired, for exemplary purpose, with musical examples, which occur in terminology as well as musical style. Furthermore, it will be seen that the anonymous thirteenth-century writer shared deeply Grosseteste's perception of the relationships among the quadrivial arts. Grosseteste's writing, contained in his major theological works, is preceptual; the anonymous author's writing

---

[8]Nan Cooke Carpenter, *Music in the Medieval and Renaissance Universities* (Norman, Oklahoma, 1958), pp. 33, 48. Cf. Michel Huglo, "The Study of Ancient Sources of Music Theory in the Medieval Universities," in: *Music Theory and its Sources. Antiquity and the Middle Ages* (Notre Dame, 1990), pp. 150-172, who has rated the influence of music by noting extant copies of texts concerning music, concluding that music's curricular influence diminished within the medieval university. Both writers, from different angles, come to the same point of view.

on music is technical and exemplary. Together they show us music's unique function and place in the intellectual world of the early thirteenth century.

The purpose of this book, then, is to place music in the context of the intellectual environment found at the thirteenth-century university. This has been attempted in the past, but, as the result of a view of music in a separate disciplinary position, along unproductive lines of investigation. This view of music as a separate, professionally-oriented discipline is anachronistic, and does not take into account the flexible, fluctuating, interconnected, and cohesive nature of medieval disciplines. We would designate these disciplines as meta and paradisciplines; Robert Grosseteste articulates the discipline of music as a ministry discipline, exemplifying the concept of connection itself.

What was music's special ministry? What challenges did thirteenth-century writers on music acknowledge and accept for themselves? What questions were important to them; what were the generating impulses to these questions; and how did answers find application in music, the field of their specialized understanding? These problems will be treated in the chapters which follow, in which, one by one, the intellectual components of this early university intellectual milieu will be discussed. A society of concepts will, in the end, be the result, in which each concept possesses a separate, distinct format, but altogether they form an aggregate of powerful ideas—ideas that changed the complexion of western music as well as western intellectual civilization.

It is an exciting, baffling period in the history of music, as well as writing concerning music, hence it has attracted a stream of literature.[9] Much of the work with the sources of our knowledge concerning this intellectual climate has been comparative and descriptive, in that texts concerning music have, in the past, been compared solely with one another. These texts were, however, primarily extended *exempla* of fundamental concepts that were assumed, not explained.[10] Musical phenomena, styles, and compositional genres served as analogies to basic concepts which were so well-known to the current intellectual community that it would have been tedious beyond

---

[9]See, for example, Wilhelm Meyer who employs an arbitrary mechanistic model according to which the motet genre "arose" from previously composed *organa,* announcing, in 1898, that he had discovered the origin of the motet (cf. *"Der Ursprung des Motetts," Nachrichten von der Wissenschaften zu Goettingen, philosophisch-historische Klasse,* II/113; in Meyer's *Gesammelte Abhandlungen zur mittellateinischen Rhythmik,* ii [Berlin, 1905], pp. 303-41). Theories regarding origins of music genres, as well as applications of theories resulting in transcription of compositions into modern notation, (for example, in the use of the "rhythmic modes"), have not changed since the early years of the twentieth century in spite of the tremendous growth of primary medieval sources recently made available in editions, translations, and indices.

[10]Examples teach without a teacher, stated Grosseteste (in his *Hexaemeron* commentary, ed. Dales and Gieben, p. 41).

all belief to reiterate them. These concepts have since been lost; their revolutionary dynamism has faded into obscurity or commonplace, or their relationship to music has been served. They must be consciously rediscovered, and the connection to music established, in order to give significance and vitality to the music theoretical writing they generated.

In every case the sources of our knowledge concerning the music of the thirteenth century require an intellectual background. The terminology collected from the reading of these texts calls for more explanation than one receives from the texts themselves, when these texts address a specific disciplinary field. Terms such as *proprietas*, *perfectio*, *figura*, and *modus* must be related to the sources which generated them. Word must be joined with its conceptual tradition—a tradition long before extablished, hence ubiquitously available in the thirteenth century.

Music writing thus shows us the place of music itself amongst the arts, and, furthermore, the interrelationships that existed between the arts. All of the arts, as Grosseteste reiterates, were necessary; each art provided a specific irreplaceable exemplification of fundamental ideas, which, in turn, unified them. Each provided a disciplinary window from which to view a concept, such as motion. No single art could be replaced by another for a complete understanding of the problem at hand.

CHAPTER ONE

THIRTEENTH-CENTURY MOTION THEORIES AND THEIR MUSICAL APPLICATIONS: ROBERT GROSSETESTE AND ANONYMOUS IV

The concept of motion emerges suddenly as a seminal issue in thirteenth-century intellectual discourse. Motion, in the thirteenth century, is divisible according to maximum and minimum partitions. It is frequently compared to tremor, and, as a concept, is given importance of place and seriousness of treatment over nearly every other subject matter. Recent secondary literature, accordingly, has extensively treated this question of motion,[1] but those with an interest in the problem have tended to investigate selective issues, with the result that some problems have been overworked to the exclusion of both the context of motion discussion in medieval writings and other, more crucial, considerations.[2] Often the real concerns shared by thirteenth century writers have been ignored.[3]

One of the prime sources for this thirteenth-century interest in motion is Aristotle's *Physica.* This work, as well as commentaries on it, discuss motion's nature and measurable constructive properties. Medieval writers, in their interpretation of the *Physica,* differentiate between locutionary, divisible, and measurable motion on the one hand, and tremor on the other, topics which, for example, greatly interested Robert Grosseteste. His writings—although he himself used the *translatio vetus* for his commentary—were produced during the wave of response to Michael Scot's translation of the *Physica* (ca. 1220-1235), of which there are 65 copies even

---

[1] James A. Weisheipl's article "Natural and Compulsory Movement", recently reissued in a collection of his essays, *Nature and Motion in the Middle Ages* (*Studies in Philosophy and the History of Philosophy* 11, Washington D. C., 1985), pp. 25-48 includes in its footnotes a bibliography of this literature.

[2] Writers, for the most part, have concentrated on the principal problem, *Omne quod movetur ab alio movetur.* See especially Roy R. Effler, O. F. M., *John Duns Scotus and the Principle "Omne quod movetur ab alio movetur"* (St. Bonaventure, New York, 1962), and James A. Weisheipl, "The Principle *omne quod movetur ab alio movetur* in Medieval Physics," *Nature and Motion*, pp. 75-97. Edward Grant's treatment of space, empty space, and vacuum is recent and comprehensive; see: *Much Ado about Nothing: Theories of Space and Vacuum from the Middle Ages to the Scientific Revolution* (Cambridge, 1981).

[3] One of these concerns, the relationships among the *artes liberales*, which attracted intense and prolonged discussion in the thirteenth century, is a case in point. It is a subject which is no longer interesting. One reason for this is that those who study the culture of the Middle Ages are more interested in—and, in fact, find their academic niches within—modern disciplines, which have developed since the early nineteenth century in order to give academic legitimacy to the subjective interpretation of the Middle Ages. These include history, art history, musicology as it exists today, and literature. Medieval disciplines, their overlapping areas of information and competence, and particularly the quadrivial arts and their interactions with one another attract less concern.

today. A portion of Averroes' great commentary on the *Physica,* available in the Latin translation of Michael Scot, would also have been accessible to him.[4] Grosseteste's interest in motion, however, is obvious in works other than his commentary on the *Physica,* demonstrating that his concern for the subject was lively, as well as continuous, and, further, that he had noticed that motion as a theme was common to many disciplines. We find the subject of motion treated extensively, for example, in his treatises *De artibus liberalibus* and *De generatione sonorum,* in which Grosseteste achieves clarity concerning the most significant properties of motion.[5] Sensitive, as well, to music and its exemplary capacity, Grosseteste perceived that the ideal analogy to both the natural and philosophical aspects of the phenomenon of motion was indeed music. Because music existed invisibly within the course of time, its measurements demonstrated the longitudinal movement of time. Motion, therefore, for Robert Grosseteste, could best be exmplified in music.[6]

Motion intrigued thirteenth-century intellectuals like Robert Grosseteste for two reasons. First, it is the most significant aspect of Aristotle's *Physica,* which had been recently translated and newly incorporated into the curriculum of the medieval *artes* faculty by the middle of the thirteenth century. The *Physica* was an important component of the "new learning" and immediately generated written discussion and commentaries.[7] The second reason for this medieval preoccupation with motion was that all the liberal

---

[4] See Bernard G. Dod, "Aristoteles latinus" in *The Cambridge History of Later Medieval Philosophy,* ed. Norman Kretzmann, Anthony Kenny, Jan Pinborg (Cambridge, 1982), which includes a useful table of translators of Aristotelian works and extant copies of these translations, pp. 74ff.

[5] Cf. *De generatione sonorum,* ed. Ludwig Baur, pp. 7-10; *De artibus liberalibus,* ed. Baur, pp. 1-7. Grosseteste treated motion in several other treatises, for example, *De motu corporali et luce,* ed. Baur, pp. 90ff; *De motu supercaelestium,* ed. Baur, pp. 92-100; and *De finitate motus et temporis,* ed. Baur, pp. 101-106.

[6] Richard Southern comments on this sensitivity to music in Robert Grosseteste: *The Growth of an English Mind in Medieval Europe* (Oxford, 1986), pp. 209, 232, 318, but there is internal evidence for an interest in and knowledge of music on the part of this author, as, for example his quotation of Augustine's *De musica* (in *De intelligentiis,* ed. Baur, p. 119): De hoc Augustinus in libro sexto Musicae ita ait: Ego ab anima hoc corpus animari non puto, nisi intentione facientis; nec ab isto quicquam illam pati arbitror, sed facere de illo et in illo tanquam subiecto divinitus dominationi suae, aliquando tamen cum facilitate, aliquando cum difficultate operari, quanto pro eius meritis magis minusve ei subiecta est natura corporea. Corporalia ergo quaecunque huic corpori ingeruntur aut obiiciuntur extrinsecus, non in anima, sed in ipso corpore aliquid faciunt, quod eius operi aut adversetur aut congruat. (*De musica* VI, 5 n.9, *PL* 32: 1168.) But Grosseteste's understanding of music's special competence can be seen best by his frequent allusions to music as an example of the subject he is currently examining, even when neither text nor topic at hand directly invoke these references.

[7] The extent of these commentaries can be seen, at least partially, in Albert Zimmermann's *Verzeichnis ungedruckter Kommentare zur Metaphysik und Physik des Aristoteles aus der Zeit von etwa 1250-1350,* Bd. 1 (Leiden, 1971); John Murdoch, in "Infinity and Continuity," *Cambridge History of Later Medieval Philosophy,* p. 565, remarks that "the *Physica* was the most commented upon of Aristotle's natural philosophical works through the first half of the fourteenth century, and, further, that it received more attention at Oxford..."

arts had it in common, as Grosseteste pointed out in his work on that subject.

Motion then was a pivotal concept; its significance could be understood as a comprehensible feature of each discipline. This idea of manifold facets of a phenomenon, differentiated according to the disciplinary window from which they were viewed, was prepared by Aristotle himself. Motion, as an abstraction, was explained in the *Metaphysica,*[8] as a component of the artistic process in the *Poetica;*[9] and it was compared to the continuum of a regime, or of life's conduct, in the *Ethica.*[10] All of these countenances of motion were useful for an understanding of its total nature. All faces of motion influenced the discipline of music, and, in turn, could be exemplified by music, as Grosseteste demonstrates.[11] These multiple conceptualizations of motion as they occur in the *Metaphysica, Physica, Poetica, and Ethica* must all be taken into consideration in order to obtain a complete medieval impression of motion.

The harmonization of these features was one of the purposes of the many commentaries on the *Physica;* the multivalence of the Aristotelian concept of motion made these commentaries necessary. If the concept itself had not interested Robert Grosseteste and others so much, they would, no doubt, have not written about it with the degree of interaction with the subject matter that one notes. There appears to be a personal commitment to the subject matter, for example, in Robert Grosseteste's comments, because he returns to the subject even when his theme at hand does not directly require that he do so, as, for example, in his work on the *artes liberales,*[12] and

---

[8] Grosseteste points to the *Metaphysica's* expository treatment of motion as an abstraction in *De motu supercaelestium* (ed. Baur, p. 94): Item cum iste motor sit abstractus, neque movetur ab aliquo moto, remanet dubitatio de modo motoris ipsius, scilicet: quomodo facit motus? Et sermo Aristotelis (*Metaph.* XII, 7. 1072a 26f) est hic et XII Metaphysicae, quod primum sic movet sicut desideratum et intellectum movet nos. Sed cum desideratum moveat nos per modum finis, tunc et iste motor in illis erit per modum finis: et quaestio nostra est de eo, quod movet per modum efficientis. See also *De motu,* ed. Baur, p. 100 in which Grosseteste refers to *Metaphysica* XII, 8.1073 a 32f; 1074a 18ff for the same reason and directly relates the concept of motion to time.

[9] The forward, continuous, successive motion of the plot is presented throughout the *Poetica.*

[10] *Ductus/conductus* as successive motions with incremental particulars is a recurring concept in Aristotle's *Nichomachean Ethics.*

[11] The concept of motion has seminal importance and occurs at the beginning of *De artibus liberalibus:* In humanis vero operibus erroris purgationes et ad perfectionem deductiones sunt artes septenae, quae solae inter partes philosophiae ideo censentur artis nomine, quia earum est tantum effectus, operationes humanas corrigendo ad perfectionem ducere. Opera enim nostrae potestatis aut in mentis aspectu, aut in eiusdem affectu, aut in corporum motibus, aut eorumdem motuum affectibus omnia consistunt...Cum autem attendimus non ad illud, quod efficitur per motus corporeos, sed in ipsis motibus moderationem, modificatrix est musica (ed. Baur, pp. 1-2).

[12] The concept of motion is used in discussing proportions: Haec enim, ut asseruit Macrobius motuum proportionibus reperitur concordantia. Proportiones vero motuum secundum duplicem motus divisibilitatem considerantur. Est enim motus divisibilis divisibilitate temporis et secundum hanc divisibilitatem dicitur motus duplus ad alium, qui duplo mensuratur

because this particular concept, in all of its facets, could be observed in and substantiated by personal life experience.[13]

Since it was the most important problem contained in the *Physica,* motion became the central issue of natural philosophy. Aristotle presents the problem of motion with careful exemplification in opportune, memorable moments of this treatise—at the beginning of the work and again at the beginning of book 3. It is generally true that the concepts which found the most resonance in the thirteenth century were those which had a clear profile and were presented either shortly after the beginning, or at the beginnings of significant divisions, within Aristotle's works. In the *Physica,* Aristotle divides his discussion of motion into sections in order to make the subject more comprehensible. These sections include: the nature of motion, examples, and types of motion. He actually presents his categories of motion first since they can be observed and thus are easier to understand than the nature of motion itself. Accordingly, the Philosopher discusses types in the first two books of the *Physica.* These include: 1) change,[14] 2) process, as when a simple thing is said to become something else, a category which includes 3) survival or persistence, as in survival through a process or within a process,[15] 4) impulse, which is particularly significant since the term brings up the two essential dimensions of nature, that is, the capacity for being moved and for coming to or being at rest;[16] and finally, 5)

---

tempore, sicut etiam syllaba longa respectu brevis dupla est; et motus divisibilis et proportionalis proportionalitate et divisibilitate spatii: sicque motus dicitur duplus ad motum, qui in eodem tempore duplum pertransit spatium (ed. Baur, p. 2). In this context, Grosseteste returns to the subject of music: Et cum a motibus coelestibus sit concordantia temporum et compositio et harmonia mundi inferioris et rerum omnium compositarum ex quatuor elementis, necesseque sit harmoniam efficientium in effectis reperire, et extendit se speculatio musicae, ut proportiones temporum, et elementorum mundi inferioris constitutionem cognoscat, et etiam omnium elementorum compositionem (ed. Baur, p. 3; punctuation has been added).

[13] Personal experience substantiates both the concepts of procession, or the successive, and occurrence, or simultaneity: Cum inquam ita sit in numeris sonantibus, protendit se musica speculatio ut harmoniam cognoscat, non solum in numeris sonantibus seu corporalibus, sed etiam in progressoribus et occursoribus, recordabilibus, sensibilibus et iudicialibus (ed. Baur, p. 4).

[14] Change: We say that one thing comes to be from another thing, in the case both of simple and complex things. I mean the following. We can say that the man becomes musical, as what is not-musical becomes musical, or the not-musical man becomes a musical man. Now what becomes in the first two cases—man and not-musical—I call simple, and what each becomes—musical—simple also. But when we say the non-musical man becomes a musical man, both what becomes and what it becomes are complex. *Physica,* 189b34 (trans. R. P. Hardie and R. K. Gaye), *The Complete Works of Aristotle, The Revised Oxford Translation,* 2 vols., ed. Jonathan Barnes, Bollingen Series LXXI.2 (Princeton, 1984), I, p. 324. All quotations from the *Physica* are taken from this work.

[15] Survival or persistence through process: When a simple thing is said to become something, in one case it survives through the process, in the other it does not. For the man remains a man and is such even when he becomes musical, whereas what is not musical or is unmusical does not survive, either simply or combined with the subject. *Physica* 190a9.

[16] Impulse: cf *Physica* 192b16f for the presence or absence of an "innate impulse to change... which seems to indicate that nature is a principle or cause of being moved and of being at rest in that to which it belongs primarily in virtue of itself and not accidentally."

growth and continuous change toward some end.[17] Indefinite, spontaneous, chance or arbitrary movement, for example, of fortune, is especially difficult to classify, and Aristotle comments on the problematic nature of fortune in several contexts.[18] The apparently irreconcilable, yet observable phenomenon of chance leads Aristotle to a subject to which he frequently returns in his exposition, namely, that seemingly contradictory statements or lines of reasoning can, at the same time, be correct.[19]

Aristotle's discussion of the nature of motion, simply because it is so basic—therefore self-evident—has frequently been overlooked. As a matter of fact, Aristotle himself writes more concerning the motion of natures, waiting to introduce his discussion of the nature of motion until the beginning of book 3, despite the fact that his discourse up to that point has been exclusively centered around the nature of motion. He writes: "Nature is a principle of motion and change, and it is the subject of our inquiry. We must therefore see that we understand what motion is, for if it were unknown, nature too would be unknown." and "Now motion is supposed to belong to the class of things which are continuous; and the infinite presents itself first in the continuous, that is, how it comes about that the account of the infinite is often used in definitions of the continuous; for that is infinity. Continuous motion is divisible."[20]

Aristotle's examples of motion include music, dogs, men, horses, and mathematics.[21] Mathematicians abstract shape from motion: Now the mathematician, though he too treats of these things, nevertheless does not treat of them as the limits of a natural body; nor does he consider the attributes indicated as the attributes of such bodies. That is why he separates them; for in thought they are separable from motion, and it makes no difference, nor does any falsity result, if they are separated.[22]

---

[17] Continuous change towards some end: By gradual advance in this direction we come to see clearly that in plants, too, that is produced which is conducive to the end...Moreover, among the seeds anything must come to be at random. But the person who asserts this entirely does away with nature and what exists by nature. For those things are natural which, by a continuous movement originated from an internal principle, arrive at some end: the same end is not reached from every principle; nor any chance end, but always the tendency in each is towards the same end, if there is no impediment. *Physica* 199a24; 199b14.

[18] Chance, spontaneous and arbitrary change: Chance and what results from chance are appropriate to agents that are capable of good fortune and of action generally. Therefore, necessarily, chance is in the sphere of actions. This is indicated by the fact that good fortune is thought to be the same, or nearly the same, as happiness, and happiness to be a kind of action, since it is well-doing...The spontaneous on the other hand is found both in the beasts and in many inanimate objects. *Physica* 197b1f.

[19] Correctness of apparently contradictory statements: It is necessary, no doubt, that the causes of what comes to pass by chance be indefinite, and that is why chance is supposed to belong to the class of the indefinite and to be inscrutable to man, and why it might be thought that, in a way, nothing occurs by chance. For all these statements are correct, as might be expected. *Physica* 197b9f.

[20] *Physica* 200b13; 17.

[21] *Physica* 191b15-25.

[22] *Physica* 193b32.

Musical analogies exist as examples of all of these aspects. Music, for example, exposes its nature by its motion in time. Conversely, the nature of motion itself can be demonstrated by music situated in time, but, since musical time flow is manipulated artistically, music also includes empty space, or constructed pauses. Music is, therefore, also the fulfillment of what motion is potentially. It demonstrates continuity and interruption, the passage of time, and time's measurable divisibility. Finally, in the thirteenth century, music, would demonstrate continuous but contrary lines of motion brought together or reconciled in convincing, artistically-constructed consonance.[23]

In summary, Aristotle states that a proportional relationship exists between motion and nature, that motion, in fact, is nature. Motion is continuous and infinite as well as measurably divisible. Place, empty space, and time are all necessary conditions of motion. Further, motion is the fulfillment of what is potential. To quote Aristotle again, "The fulfillment of what is carried along is locomotion, which indeed has led some people to suppose that every mover is moved."[24] All of this—and one must admit it is rather a dense thicket of considerations—is exemplified, and therefore becomes obvious through contraries.[25]

Despite the fact that Aristotle defines motion, as he states, both generally and particularly, his concept of motion is difficult to understand because one must also understand potentiality, privation, process, activity, and passivity. The final properties of motion, activity, and passivity, which were the same, yet not identical, posed a particular problem, namely, how contraries could be simultaneously true or how different things could be harmonized, reconciled, and made consonant with one another. This question is answered by stating that the resolution of contraries is accomplished through and by motion.

Music contained all of the properties of motion. It was continuous, and capable of—at least theoretically—infinite divisibility into tones. This quality of infinite yet measurable division, in fact, distinguishes music from undifferentiated sound and noise. Music was the actualization of the potential, an actualization which took place at the moment of sound in a release of energy. At the same time music made comprehensible—through

---

[23] The specific Aristotelian sources of fundamental concepts in thirteenth-century writing concerning music are treated, one by one, in the chapters that follow. For example, one source of the highly influential concept of six "modes of rhythm" is Aristotle's six "modes of causation" (*Physica* 195b13). The rhythmic modes, like modes of causation, exhibit motoric causality, originate from six separate tendencies or inclinations, and—again like Aristotle's modes of causation—have the common characteristic that each pair's two rhythms are contraries one of the other: as, mode one: long-short, mode two: short-long. All of the modes together contain a complete compendium of the rhythmic formats which can effectively be produced by the human voice.

[24] *Physica* 201a25.

[25] *Physica* 201a33.

its very existence—the concept of process. Music, in fact, *was* process. Finally, most significantly, music exemplified the most important point of Aristotle's argumentation, namely, that two lines of music—each independent of the other, each capable of exerting energy in its own right—combined, could sound as a unity. This was accomplished as single tones sounded together in counterpoint, as point of sound against point of sound, within the longitudinal flow of separate melodic lines. Aristotle's thesis of the resolution of contraries was sensorily perceptible and intellectually comprehensible in the musical example of contrary motion. (Example: Note the visual impression given by the musical lines. As one musical line ascends, the other directly above or below it descends, and vice versa. This musical movement in opposing directions is contrary motion. Contrary motion is apparent both to the vision, in music notation, as in this example; and, when sounded, it could be heard. Thus both of the arguably most important senses were engaged in the exemplification of the principle of contrary motions resolved in consonance through motion and time.)

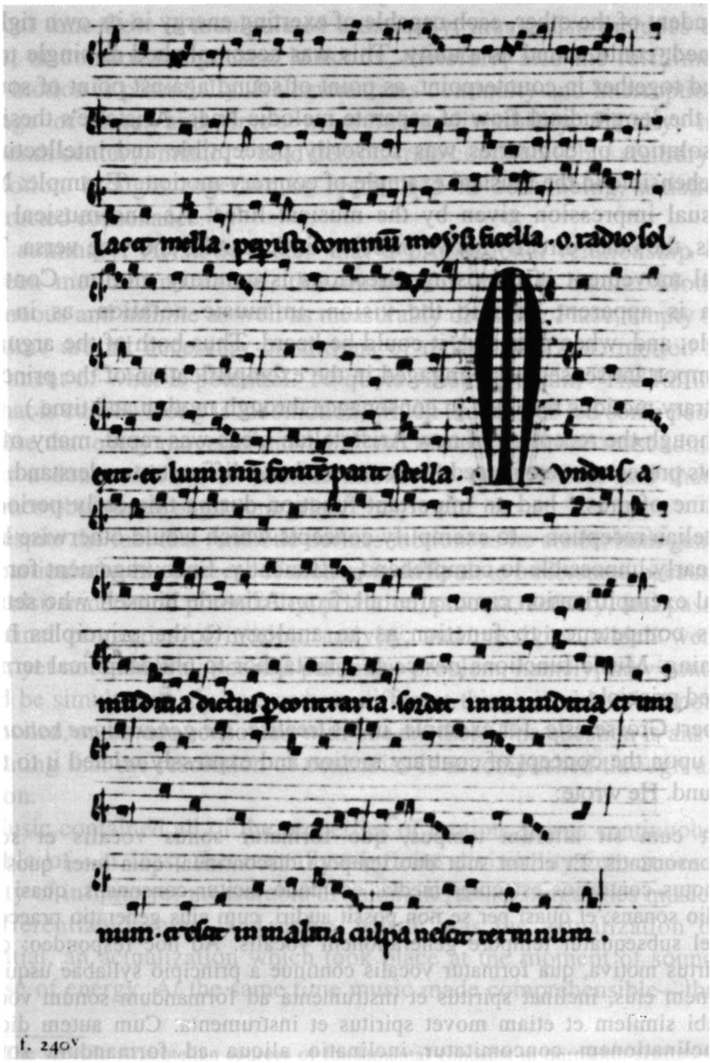
Although the reception of new Aristotelian ideas was rapid, many of the concepts presented were indeed unaccustomed and difficult to understand. The discipline of music had an important function during this early period of Aristotelian reception—to exemplify concepts which would otherwise have been nearly impossible to comprehend sufficiently. Encouragement for this musical exemplification came, after all, from Aristotle himself who sets up music's competency to function as an analogy to the principles he is explaining. Music functions *per se* as a metaphor to philosophical term or extended principle.

Robert Grosseteste, for example, in his treatise, *De generatione sonorum,* seized upon the concept of contrary motion and expressly related it to time and sound. He wrote:

> Et cum sit alterum tempus, quo formatur sonus vocalis et sonus consonantis. Et etiam sunt duo tempora discontinua, quia inter quoslibet motus contrarios est quies media: eo modo dicitur consonans, quasi cum alio sonans; et quasi per se non possit audiri, cum eius generatio praecedat, vel subsequatur tempore generationem vocalis. Ad hoc respondeo: quod virtus motiva, qua formatur vocalis continue a principio syllabae usque ad finem eius, inclinat spiritus et instrumenta ad formandum sonum vocalis sibi similem et etiam movet spiritus et instrumenta. Cum autem dictam inclinationem concomitatur inclinatio aliqua ad formandum sonum consonantis, egreditur in spiritibus et instrumentis motus unus compositus proveniens a duabus inclinationibus, sicut cum ponderosum inclinatur ad motum deorsum...[26]

[26] *De generatione sonorum,* ed. Baur, p. 9.

Example: Florence, Biblioteca Mediceo-Laurenziana, Pluteo 29, I, f. 240v: *contrary motion*



To paraphrase Grosseteste's extended explanation, two sound movements, generated by two separate inclinations, each moving in time and each distinct, could move in opposite directions. Simultaneously, from two inclinations, moving in directions contrary to one another, unity at points of stationary convergence could be achieved; that is, the *quies media* (*inter motus contrarios est quies media*). The vocabulary Grosseteste uses is a terminology which could be loaded with musical significance, and indeed it was. Many of his expressions, such as *tempus, proportio, sonus vocalis, motus contrarius,* and *sonus consonantis* could also be understood as a musical conceptual language, a fund of words and concepts which immediately brought music to mind. This fact demonstrates the intrinsic interdisciplinary nature of this knowledge transfer; but it also shows that the richness of the meaning of these terms can be accessed only when their entire multidisciplinary context is taken into consideration. For musicologists, the specifically non-musical significance is crucial for the understanding of these terms.

As an indication of how a thirteenth-century mind could operate, Grosseteste's thought process follows. He had assimilated the categories of the nature of motion as they were presented in the *Physica.* Motion stands in a proportional relationship to and with nature.[27] It is continuous, that is, infinitely divisible.[28] Motion exists within place and time; empty space is also a necessary feature of its existence.[29] Finally, motion is a fulfillment of what is potential motion; locomotion is that fulfillment of motion as it moves along steadily to a goal.[30] Digested, reorganized, extended, with emphasis placed according to the strong selective will of the writer, these characteristics of motion find their place in Grosseteste's concept of locution.[31]

Locutionary continuous motion is distinguished by its divisibility into minute particles. It is therefore subject to close control and is measurable. Grosseteste presents a concept of measurable continuous movement, not

---

[27] Grosseteste discusses sound, motion, and nature in much the same manner in his commentary to the *Posterior Analytics* (II.4), *De artibus liberalibus* (ed. Baur, p. 2f), and *De generatione sonorum* (ed. Baur, p. 7f), as Baur's parallel edition makes clear. See *Die philosophischen Werke Grossetestes*, I, p. 58*f.

[28] Proportiones vero motuum secundum duplicem motus divisibilitatem considerantur. Est enim motus divisibilis divisibilitate temporis et secundum hanc divisibilitatem dicitur motus duplus ad alium...(*De artibus liberalibus*, ed. Baur, p. 2).

[29] Space:...et motus divisibilis et proportionalis proportionalitate et divisibilitate spatii: sicque motus dicitur duplus ad motum, qui in eodem tempore duplum pertransit spatium (*De artibus liberalibus,* ed. Baur, p. 2).

[30] Cf. an expression of a type of loco-motion, or locutionary motion: Hinc motus locutionum intelligo, quae licet a motu efficiatur, a natura motus non censetur sejungenda (*De artibus liberalibus*, ed. Baur, p. 2).

[31] Grosseteste's discussion of locutionary motion differentiates between divided, divisible, or measured motion and tremor, that is, between continuous percussive motion and sound which is "non esse continuum, sed interruptum et numerosum" (*De artibus liberalibus*, p. 3).

unlike natural movement, leading to a goal. He presents a concept of longitudinal teleological continuity motivated by generative purpose. In *De artibus liberalibus,* Grosseteste writes: "Quinque ergo sunt proportiones, quarum tres sunt minime multiplicium et duae maxime superparticularium: quia haec sunt inter maximas et minimas divisiones in motu secundum tarditatem, vel velocitatem, vel secundum utramque." [32]

Grosseteste's discussion of locutionary motion, and its divisions, occurs in the context of his writing on the liberal arts. In fact, motion is what all of the arts have in common.[33] Each of the liberal arts expresses motion in a way that is proper to its disciplinary territory. Grosseteste's care in laying out the characteristics and significance of locutionary motion is necessary for the next step, the concept of locutionary motion itself. It is directionally focused, controlled, and can be both constructed and analysed because it can be measured. This motion reaches an end or goal through process.[34] It is a concept of locutionary motion which is multivalent in its applications.

---

[32] This important passage continues: Haec numquam praestant in motibus perfectum moderamen. Hinc motus locutionum intelligo, quae licet a motu efficiatur, a natura motus non censetur sejungenda. Cum enim corpus violenter percutitur, partes percussae et constrictae a situ naturali secedunt. Quas virtus naturalis ad situm naturalem inclinans fortiter metas debitas facit transscendere ipso impulsu naturali; iterum a situ naturali egrediuntur et de una inclinatione naturali situm transgredientes revertuntur generaturque hoc modo tremor in minutissimis partibus percussi corporis, donec tandem inclinatio naturalis non ultra situm debitum eas impellat. In hoc autem tremore et motu locali partium motarum necesse est, cum quaelibet pars per situm sibi naturalem transeat, eius diametrum longitudinalem esse in termino suae diminutionis et diametri transversales erunt in termino suae majorationis. Cum autem transierunt situm naturalem, diameter longitudinalis extenditur et transversales contrahuntur, donec perveniant ad terminum motus sui localis; eruntque tunc diametri transversales in termino suae diminutionis et longitudinales in termino suae majorationis. Deinde, cum redierit, erit extensio et contractio diametrorum via conversa. Hanc autem extensionem et contractionem ingredientem profunditatem materiae et praecipue id, quod est aereum subtile in corpore, sonativum esse intelligo. Cumque inter quoslibet motus contrarios sit quies media, necesse est, sonum quantumcumque parvum audibilem non esse continuum, sed interruptum et numerosum, licet hoc non percipiatur.

Cum itaque eisdem proportionibus humanae vocis, et gesticulationibus humani corporis modulatio temperetur, quibus soni et motus corporum reliquorum, speculationi musicae subjacet non solum harmonia humanae vocis et gesticulationis, sed etiam instrumentorum et eorum, quorum delectatio in motu sive in sono consistit et cum his harmonia coelestium sive noncoelestium. Et cum a motibus coelestibus sit concordantia temporum et compositio et harmonia mundi inferioris et rerum omnium compositarum ex quatuor elementis, necesseque sit harmoniam efficientium in effectis reperire et extendit se speculatio musicae, ut proportiones temporum, et elementorum mundi inferioris constitutionem cognoscat et etiam omnium elementorum compositionem. *De artibus liberalibus*, ed. Baur, p. 2-3.

[33] See above, n. 11.

[34] This concept of measured, directed motion cannot be found in, for example, Martianus Capella's description of motion in *The Marriage of Philology and Mercury* (trans. William Harris Stahl and Richard Johnson with E. L. Burge [New York, 1977], II, p. 9): Amidst these extraordinary scenes and these vicissitudes of Fortune, a sweet music arose from the trees, a melody arising from their contact as the breeze whispered through them; for the crests of the great trees were very tall and, because of this tension, reverberated with a sharp sound; but whatever was close to and near the ground, with drooping boughs, shook with a deep heaviness of sound; while the trees of middle size in their contacts with each other sang together in fixed harmonies of the duple, the sesquialtera, the sesquitertia also, and even the sesquioctava without discrimination, although the semitones came between. So it happened that the grove poured forth, with melodious harmony, the whole music and song of the gods.

Grosseteste was more interested in some examples of motion than in others. Among these are the direction and continuity of sound—especially the sound of the human voice, displaying the proportional divisions of long and short syllables, and pursuing a purpose which arrived at an end. He chose this example for discussion. In a rapid succession of important issues and terms, he presents an entire complex of aspects for his concept of *virtus motiva* and of contrary motion. These aspects are: 1) progression (*in progressione ad auditum*[35]), 2) the instrumental character of *virtutes motivae* (*et quia virtutes motivae corporis instrumenta*[36]), 3) an aspect of continuity or governance (*necessarium est regimen et adjutorium, quibus purgetur error et suppleatur defectus*[37]) which was 4) divisible (*Proportiones vero motuum secundum duplicem motus divisibilitatem considerantur. Est enim motus divisibilis divisibilitate temporis et secundum hanc divisibilitatem dicitur motus duplus ad alium, qui duplo mensuratur tempore...*[38]) leading to 5) perfection, completeness, or a goal (*et ad perfectionem deductiones sunt artes septenae, quae solae inter partes philosophiae ideo censentur artis nomine, quia earum est tantum effectus, operationes humanas corrigendo ad perfectionem ducere*).[39] Grosseteste's locutionary motion transcends natural motion because of its directional, longitudinal aspect, its transverse diameter, and its termination. Tremor is the opposite of longitudinal motion in nearly every respect, since it remains in one place, in one situation, and has no recognizable, orderly progression. Tremor, therefore, is useless as a type of motion in artistic construction. In contrast, longitudinal, divided motion is ordered and has distinctive measurable parts whereas tremor is erratic, stationary, uncontrolled, and indefinite.[40] Grosseteste carefully defines his principle of locutionary, continuous motion first, then considers contrary motion. The format of his discussion, as R. W. Southern has pointed out, is a presentation of succinct areas in a logical progression, rather than developed in a *Summa.* Grosseteste's discussions contain very few examples, however, his essay on the liberal arts primarily addresses

---

Cf. Remigius of Auxerre's commentary on this passage (*Commentum in Martianum Capellam*, Libri I-II, ed. Cora E. Lutz [Leiden, 1962-65]), p. 86f). This concept of motion was highly influential in the Middle Ages, but, rather than locutionary motion, it corresponds to a concept of tremor. The concept of divided, interrupted, measurable time-lapse is exactly what occurs in a musical work of art, whereas tremor is nearly useless as an artistic time-lapse concept.

[35] *De artibus liberalibus*, ed. Baur, p. 3.

[36] "Virtutes motivae" is an expression used by Grosseteste at the onset of *De artibus liberalibus* (ed. Baur, p. 1). Furthermore, Grosseteste distinguishes in several contexts between voices and instruments.

[37] *De artibus liberalibus*, ed. Baur, p. 1.

[38] *De artibus liberalibus*, ed. Baur, p. 2.

[39] Mentis ergo aspectum et affectum hac tres virtutes rectificant et ad perfectionem perducunt. *De artibus liberalibus*, ed. Baur, p. 2. (cf. p. 1.)

[40] Grosseteste discusses tremor at length in *De generatione sonorum*, ed. Baur, pp. 7-10. After presenting the possibility of tremor, he proceeds to his discussion of characteristic motions, or figures, a subject which is the chief topic of Aristotle's *Poetica*.

music. One comes to the conclusion that, for Grosseteste, music, in its nature and gestures, was the outer, perceptible example for both divisible and contrary motions.

One can take issue with both Beryl Smalley, who regarded Grosseteste as a conservative, habitually looking backward,[41] and Richard Southern, who presents him as insular, fiercely independent, and original.[42] Grosseteste selected aspects of Aristotle's treatises that especially interested him (such as motion). His particular characteristic, however, lay in his ability to see the function, value, and special competency of music to explicate physical properties such as motion in sound. While Southern noticed what he considered to be Grosseteste's aptitude for music,[43] Grosseteste's substantial contribution to speculative music theory has not been noticed. Furthermore, both Smalley and Southern have stated that Grosseteste's influence was minimal during his own lifetime. They both, however, overlooked an important emphasis in his writing, that is, his concern for the understanding and articulation of musical relationships.

One first notices Grosseteste's pronounced emphasis on music in his discussion of the liberal arts in which he develops an entire system of contrapuntal rules. In each case Grosseteste's term or rule will be presented first; then, its direct musical application, as set forth by a contemporaneous anonymous writer who, as far as we know, also lived and worked in England.[44] First, Grosseteste presents the term "contrary motion," an important concept, also selected by music theory, where it can be visually observed—in the music itself—and verbally explained.[45] Secondly, Grosseteste explains the concept of a "quiet median," a mid-point of rest within contrary motion, or between melodic lines which demonstrate contrary motion. In contrapuntal theory, consonances, or certain intervals which give a sense of musical repose, must be used when two tones occur

---

[41] See *Robert Grosseteste, Scholar and Bishop*, ed. D. A. Callus (Oxford, 1955), pp. 71-74.

[42] R. W. Southern, *Robert Grosseteste*, pp. 1, 296-298.

[43] R. W. Southern, *Robert Grosseteste*, especially p. 318.

[44] A summary of the little that is known concerning this writer is given by Fritz Reckow in the introduction to his edition of Anonymous IV's treatise, *Der Musiktraktat des Anonymus 4*, 2 vols (*Beihefte zum Archiv fuer Musikwissenschaft* V, Wiesbaden, 1967), II, pp. 1-22. An indication of just how little is known concerning this individual is the fact that he has no name.

[45] "Contrary motion" is expressed by Anonymous IV in several contexts and manners, as, for example: Et isti modi sunt perfecti sicut alii; sed penes reductionem reducuntur ad modos contrarios, videlicet ad primum vel secundum, ita quod isti ultimi sexti ad secundum et primi sexti ad primum; et sic in cognitione prima satis patet (ed., p. 34).

"Mode," used frequently by both Robert Grosseteste and Anonymous IV, carries the connotation of "a way of moving:" Sed proprietas et perfectio istius erit in ordine ligatarum modo contrario et e contrario etc. (ed., p. 53). Discantus est secundo procreatus vel factus supra tenorem concordatus...De brevi autem sequenti non est cura, quia indifferenter ponitur secundum quod melius competit, et est unius temporis contra unum tempus in tenore...Aliter: si fuerint tria puncta, et unus ascendit et descendit vel descendit et ascendit etc. discantus debet opposito modo operari, si naturaliter habet...quoniam aliquando ipsis nescientibus descendunt vel ascendunt aliter in aliam concordantiam quam in consimilem (ed., pp. 74-75).

together for a significant period of time. Consonances occurring on tones of longer duration have been important for the tradition of counterpoint throughout its history.[46] Thirdly, sound is not continuous, but frequently interrupted according to artistic considerations. This tenet of Grosseteste's system is analogous to the articulation of rests in thirteenth-century music theory.[47]

Grosseteste's system also includes a concept of simultaneity or *concordantia temporum,* a concord of times. Counterpoint, from the onset, is a study, both analytical and prescriptive, of simultaneously-occurring relationships.[48] Further, Grosseteste writes of duple and triple proportions of movement as a concept of measurement (proportiones temporum). He considers proportions as progressive measurements of time, as well as quantitative relationships within time. The measurement of time, or the increasing refinement of rhythmic value indication continues from the mid-thirteenth century onward. Proportions, when applied to musical time, illustrate the dynamic quality of proportions themselves.[49] Grosseteste's consideration of motion contains a concept of composition as a composite containing elements. The concept of a "piece," or a self-contained composition, with a beginning, a middle progressive section, and a termination is not an earlier medieval idea; rather, is increasingly important

---

[46] Consonances occurring on longer, accented musical moments, or a concept of a "quiet median:" Est et altera medietas, quae dicitur armonica, quae partim convenit cum arsmetica, partim cum geometrica, prout in *Musica* Boecii *Omnium quidem perceptio* etc. plenius habetur. Iterato proportiones relativae alio modo considerantur. Quaedam dicitur aequalis ut unum ad unum, duo ad duo, tria ad tria etc., quae apud musicos dicitur aequalitas et quoad sonum unisonus nuncupatur, sive fuerit in cordis sive in fistulis organorum sive in cimbalis benesonantibus etc. (ed., p. 65). Et nota, quod primus punctus tenoris mediat continuando et quiescit in locis, in quibus magis competit secundum concordantias suprapositas, et quiescit secundum discordantias disconvenientes etc., prout melius competit (ed., p. 83).

[47] Pauses: Sequitur de tertio <capitulo>, quod tractat de pausationibus temporum sonorum, et hoc per hunc modum: pausatio est quies vel dimissio soni in debita quantitate temporis vel temporum longae vel brevis alicuius modi modorum sex supradictorum...Tempus vero eius consideratur iuxta ordinem longarum et brevium modi ante ipsam coniuncti immediate, sive fuerit primi vel secundi etc. Si fuerit primus modus perfectus ante ipsam coniunctim immediate, sic erit simplex pausatio brevis unius temporis. Et per continuationem discretionis modi antedicti post ipsam pausationem...Et talis pausatio dicitur perfecta in se (ed., p. 57). De duplici pausatione supradicta non intelligimus duplare brevem vel longam, sed prout in ordine alicuius modi intelliguntur...(ed., p. 62).

[48] Simultaneity or simultaneously-occurring points of sound: Sed puncta materialia sic distinguuntur: pone primo unam longam materialem; postmodum iunge duos currentes...(ed., p. 37)...prout universales antiqui nominaverunt, et hoc est, prout concordaverunt sonos cum sonis (ed., p. 71). Sequitur modo, sicut diximus superius de concordantiis super duo puncta, et hoc secundum sex concordantias armonicas... (ed., p. 73). The use of *cum, ad, ad invicem, contra* imply simultaneous occurence: Et oportet, quod ad minus sint ibi duae voces concordantes ad invicem secundum quod dicam, et hoc est secundum considerationem habitudinis illorum ad invicem, quod fit multiplici modo tam ex parte <dis>cantus quam ex parte tenoris (ed., p. 74). Time is the principal consideration in a concept of simultaneity:...et est unius temporis contra unum tempus in tenore (ed., p. 74).

[49] *Proportiones* and their dynamism (as expressed in the term *operari*): Et nota, quod quando contingit operari per istam regulam, si termini unius proportionis multiplicentur per eundem numerum, semper resultabit eadem proportio (ed., p. 70).

from the mid-thirteenth century onward.[50] Grosseteste's system elucidates both process and occurrence, placing together, and separation. His system sets forth both a concept of order and of figures within that order. Figures, abstracted from an ongoing organization and the ability to be figural have an important place in Grosseteste's argumentation. Figures, or separate notational configurations, can also be abstracted from music's time flow and, in fact, illustrate the contrast of particularity with continuity, of single event with forward, continuous movement. Music notation, therefore, exemplifies both continuity and configuration, and the concept of figure is, accordingly, given a good deal of attention in mid-thirteenth-century discussions of music.[51] Finally, the principle of "rule" itself is discussed by Grosseteste (quod sit regula nostrae operationis[52]). Art is dependent upon and

---

[50] The increasingly concrete concept of a "composition," culminating in the dating and titling of compositions, is a subject which requires thorough treatment. "Composition" contains and is influenced by the concept of a "composite," treated below. Robert Grosseteste relates "composite," the "letter," and "doctrine" in his commentary on the *Posterior Analytics*: Est autem precognitionis et cognitionis duplex via, scilicet a simplicioribus ad compositiora vel econverso, quod innuitur in hac littera: *utraque enim per prius nota faciunt doctrinam*...(*Commentarius in posteriorum analyticorum Libros,* ed. Pietro Rossi [Florence, 1981], p. 95).

[51] The thorough, perceptive discussion of *figures* is an especially important common subject matter for both Robert Grosseteste and Anonymous IV. Both concentrate on the configurational demonstrative competence of figures to express and delineate material, the relationship between figures and material, and the cognitive effect of figures. Both writers carefully describe figures, and both discuss the significance of shape and the joinings which connect lines and form figures. See, for example, Anonymous IV: Puncta materialia, prout depinguntur in libris et prout significant melos et tempora supradictorum, duplici acceptione accipiuntur: uno modo per se et absolute sine sermone adiuncto...apud aliquos figurae vocantur, quare nota figura potest dici; apud aliquos simplices soni dicuntur, et sic materiali signo pro formali intelligitur (ed., pp. 40f). Tres ligatae totaliter ascendendo sic notantur: fac quadrangulum et alium quadrangulum iungendo conum cum cono sive angulum cum angulo lateraliter protrahendo, iterato alium quadrangulum sibi iungendo et recte supraponendo, ut in duabus ligatis superius dictum est (ed., p. 42). See also the expanded discussion of the relationship and significance of mode and figure and their logical reductions in Robert Grosseteste's commentary on the *Posterior Analytics*:...et causa una est quia in doctrinis est semper modus et figura sillogistica, et sic excluduntur a doctrinis fallacie que peccant contra modum et figuram. In aliis facultatibus arguitur frequenter inductive et a simili et multis aliis argumentationibus que non habent modum et figuram sillogisticam licet possint reduci in figuram et modum.

Secunda causa est quod ea que sunt in mathematicis sponte se offerunt intellectui et perspicaciter videntur in intellectu; ea vero que sunt in logica et metaphysica propter remotionem eorum a sensu et subtilitatem nature sue subterfugiunt intellectum et speculantur velut a longe et non discernuntur eorum subtiles differentie...Ponit autem exemplum manifeste visionis rerum mathematicarum et parve deceptionis in his. Si enim queratur an omnis circulus sit figura cum descriptione circuli, omni intellectui manifestum est quod sit. Si autem queratur an carmen sit circulus, ut ex his concludatur quod carmen sit figura, omni intellectui patet quod circulus non dicitur ex eodem sensu de carmine ex quo dicitur de figura, sed manifestissima est equivocatio (ed. Rossi, pp. 178ff). It should also be noted in this context that Grosseteste wrote a treatise on the component parts of figures, *De lineis, angulis et figuris* (ed. Baur, pp. 59-65).

[52] Rules are also important to Anonymous IV, who frequently uses this term as well as others, such as *reductio* and *frange*, which carry the connotation of analysis: Frange ergo secundum possibilitatem vocis humanae et secundum quod melius competit iuxta similtitudinem modi secundi vel primi praedictorum et iuxta puncta materialia (ed., p. 40)...quatuor regulas regulare eiusdem coloris...Sed habebant regulas regulatas ex aliquo metalo duro ut in libris Cartuniensium et alibi multis locis (ed., p. 60). Et sic si una regula non

disposed by rules of operations. One *does* counterpoint. It is practical, operational, and procedural; but it is also characterized by its adherence to a body of rules. This makes it unique, since no other style in the history of Western music is based upon such an interlocking system of regulations.

In placing each rule before its musical counterpart, it can be seen that each of Grosseteste's tenets within his system extends to thought on music, as he himself stated.[53] For Grosseteste, music was not only an example of the quadrivial but also of the trivial arts, in that it had an organizing, order-giving "ministry."[54] Accustomed as we are to distinct disciplines and special technical vocabularies, as well as manners of expression, we are unaccustomed to the mutual dependency and interrelationship of all fields of learning. Repeatedly Grosseteste emphasizes the reciprocity, even conceptual dependency among all of the arts. Having established this, he then goes on to discuss the illustrative and organizational qualities of music, using a vocabulary which relates his treatises—through terms held in common—to contemporaneous music theoretical writing: *proportiones, concordantia, motus dicitur duplus ad motum, motus contrarius, ordo, figura, mensurata, regula,* and *imperfectum a perfecto.*

Robert Grosseteste did not thoroughly explain technical musical considerations in either *De artibus liberalibus* or *De generatione sonorum* because it is possible that he did this elsewhere. At least the possibility that Grosseteste was the author of the music treatise *De mensurata et discantu* for which Edmond de Coussemaker, in the last century, assigned the designation "Anonymous IV," should be suggested. This hypothesis is based on the fact that the treatise originated in England, and could, conceivably, have been written during Grosseteste's lifetime. Among the sparse facts of both Grosseteste's and Anonymous IV's lives, what is known is that both were associated with the monastery of Bury St. Edmunds. In a factual region where very little can be indisputably proven, however, the most convincing reason for the above suggestion of authorship is internal evidence. Stylistic similarities, methods of explication, the use of a common vocabulary, and the concise, forthright character of both works, as well as Grosseteste's own preoccupation with music, all make the possibility of common authorship plausible. That the music treatise was conserved and cherished also points to a writer of reputation. That it was not attributed to Grosseteste could be due

---

sufficit, altera sufficit. Et nota, quod quando contingit operari per istam regulam...(ed., p. 70). Cf. Grosseteste:...et artis sit diffinitio seu dispositio, quod sit regula nostrae operationis, merito hae solae artis vocabulo nuncupantur (*De artibus liberalibus*, ed., p. 4.).

[53] Cum inquam ita sit in numeris sonantibus, protendit se musica speculatio ut harmoniam cognoscat, non solum in numeris sonantibus seu corporalibus, sed etiam in progressioribus et occursoribus, recordabilibus, sensibilibus et iudicialibus (*De artibus liberalibus*, ed., p. 4).

[54] Musicae ministerium in philosophia naturali non minus utile, quam ad medendum, cum omnis aegritudo et inordinatione spirituum et intemperantia curatur...(*De artibus liberalibus*, ed., p. 4: the Baur edition has been slightly emended).

to the possibility that it was an early work, written during the years of Grosseteste's early maturity that even today remain obscure.

In comparing Robert Grosseteste's style with that of Anonymous IV, one notices the following similarities. First and most importantly, figures, for Anonymous IV, not only have music notational significance, but are analogous to geometric diagrams in the sense that they abstract and delineate material.[55] This emphasis, gauged by the frequency with which facets of the subject are discussed, is unique to this writer among contemporaneous writers on music. The anonymous author's emphasis on the figural aspect relates to his perception of the associations between music and the quadrivial arts.[56] A common dimension of both geometric figures and music notation is the importance of joints: of lines converging so that they become significant. This emphasis on joints is shared by both the anonymous author and Robert Grosseteste.[57]

Secondly, there are telling similarities in uncommon expressions used by both Anonymous IV and Grosseteste, such as *circularem processum donec circulatio perficiatur* which is unique to the anonymous writer, among contemporary writers on music, but shared by Robert Grosseteste.[58] Thirdly, both writers emphasize the separation between vocal and instrumental means of tone production. This subject again reinforces Anonymous IV's interdisciplinary command of his material and his particular insight into the

---

[55] Boni notatores in figurando sic depingunt supradicta: quidam faciunt quadrata puncta cum uno tractu vel sine, ut praedictum est; quidam non quadrata, sed per modum quadranguli vel quadrangulorum ita, quod longitudo stando sit longior longitudine iacendo vel protrahendo, sive fuerit cum tractu vel sine. Elmuahim vero oblique saepe protrahitur; et quidam protrahunt ipsum simile elmuahim (ed., p. 41). Cf. Charles Burnett, "The Use of Geometrical Terms in Medieval Music: elmuahim and elmuarifa and the Anonymus IV," *Sudhoffs Archiv,* 70 (1986), pp. 198-205. Both *joints*, which are essential to the character and signifying properties of geometrical shapes, and each line contained within geometrical shapes are carefully discussed by Anonymous IV, a preoccupation which can be compared to Grosseteste's discussion of the triangle in his commentary on Aristotle's *Posterior Analytics* (ed. Rossi, p. 95).

[56] Although this is a subject which deserves more comprehensive treatment, the use of common vocabulary has blinded scholars to significant substantial differences in style and emphasis that distinguish writers on music, one from the other, in the thirteenth century. A fund of expressions used in common by thirteenth century writers on music is not surprising since they all shared Aristotelian sources. Differences in style which make writers such as Johannes de Garlandia, whose interest is openly that of relating music to the *artes* of the *trivium*, and Anonymous IV, whose emphasis is upon the place of music within the quadrivial arts, have not been sufficiently discussed.

[57] Over the relationship of lines and points to material, Anonymous IV had much to say. He discusses the relationship of sign to material property and the result of intellectual understanding: Longarum materialium multiplex est < modus>...Et dicitur recta brevis materialis, quia significat rectam brevem unius temporis (ed., pp. 43f). Gallici vero Parisius habebant omnes istos modos supradictorum, prout in libris diversis a diversis notatoribus plenius patet, ad cognitionem quorum sic procedimus (ed., p. 51). Per quas regulas potestis verificare exempla materialis significationis, quae notantur in principio...sicut de modis perfectis intelleximus ed., p. 52).

[58] Et sic procedit iuxta numerum, quousque habueris circularem processum,...et sic procede de istis novem, sicut fecisti de sex supradictis suo modo, donec habueris circularem sufficientiam; et tunc reitera (ed., p. 35, cf. p. 36).

quadrivial arts and their relationship to each other. The format of rhythm, for example, could best be exposed by instrumental delineation, just as geometric figures expose—by their delineatory power—the essence of the material contained. Anonymous IV's focus on instruments, and their potential for exposing the outline of rhythmic shape, shows his sensitivity to an important internal connection between the quadrivial arts, namely, that they all define, diagram, and delineate material. Finally, both writers share a pronounced concern for sign/property versus intellectual understanding. Signs, for both Anonymous IV and Grosseteste, indicate intellectual material. All of these similarities will be discussed again below.

There are historical reasons as well. Anonymous IV mentions personalities such as Iordanus de Nemore, Chancellor Philippe, Robertus de Sabilone, and Perotin, among others.[59] In some cases—as in Perotin's—his is the only witness we have to their importance and activity. Without exception, these persons were active either directly before or during the period when Grosseteste himself was engaged in the writing projects mentioned above, that is, *De artibus liberalibus* and *De generatione sonorum,* ca. 1222-1237. It was also the period when, according to Richard Southern, Grosseteste, after some fifty-five years of obscurity, enjoyed a turning period in his career which would lead eventually to his investiture as bishop of Lincoln, England's most populous episcopal see.[60] This was due, according to Grosseteste's only biographer of his early years, Richard, monk of Bardney, to Grosseteste's friendship with the young King Henry III. Richard writes: "Grosseteste was the King's friend; he sat at his table among his friends, and acted as his secretary, and then became the keeper of the royal seal."[61] Henry III (1217-1272) would have been a young man during the period under consideration. The only mention of a certain Blakesmit, cantor to Henry III, and otherwise apparently of no reputation whatsoever, occurs in Anonymous IV's treatise.[62] Grosseteste, of course, would have been well-acquainted with the king's entire entourage had he sat at table in the king's court. Richard Southern has appropriately stated that "little-known writers do not easily get the credit for writing works in competition with greater names." All of his earlier works were written when Grosseteste was unknown. Further, it is important to note that all attributions of the earlier works, written between 1222 and 1237, to Grosseteste are subject to discussion; his list of works has been repeatedly revised.

In conclusion, the hypothesis that Grosseteste wrote a treatise on music should be placed in a proper perspective. After all, the possible identity of

---

[59] See Fritz Reckow, *Anonymus 4*, I, pp. 95-102.
[60] Richard W. Southern, *Robert Grosseteste*, pp. 78-82.
[61] Southern, *Grosseteste*, p. 81.
[62] *Anonymus 4*, I, p. 95.

an anonymous writer on the subject of music is of interest only to a relatively small group of music historians working in the limited field of thirteenth-century music theoretical sources, and the fact that a treatise on music could conceivably be added to Robert Grosseteste's lengthy list of writings is of more interest, again, to a relatively small group of scholars who study the life and works of this thirteenth-century personality. The circumference of interest in both cases is limited. The impact, however, of what has been set forth goes beyond the immediate considerations of both music theory, Anonymous IV, and Grosseteste.

Music uniquely exemplified an absolutely pivotal concept. This concept was exposed by all of the major Aristotelian works, the *Metaphysica,* the *Poetica,* the *Ethica,* and the *Physica.* Motions—of discourse, of physical bodies, of thoughts, and, especially, of musical melodic lines—which appeared to oppose one another by their contrary impulses, their sources of directions, and their movements toward goals—could be made to be reconciled with one another. This had an analogy as well, as the Apostle Paul pointed out, in the Christian life.[63] The point of reconciliation, of simultaneous consonance, was the point of rest, the *quies media.*

The system of musical counterpoint—as point of sound against point of sound—made this plain to the ear and, in music notation, to the eye as well. Thus, this difficult idea of contrary motion would be articulated, understood, and, conversely, influenced the composition of music for the next 600 years. No other concept in the history of western music has had such power.

---

[63] Col. 1:15-17. "Harmony" within opposing movements is expressed by the group of early-Christian Greek writers known as the "Cappadocians." Cf. Jaroslav Pelikan, *Christianity and Classical Culture. The Metamorphosis of Natural Theology in Christian Encounter with Hellenism* (New Haven, Connecticut, 1993), p. 72. Of this group, Basil of Caesarea, in particular, is quoted by Robert Grosseteste, but predominately in his later work, the commentary on the first Chapters of Genesis, when his knowledge of Greek was sufficient to deal with Basil's text, augmenting what he would have received from its Latin paraphrase. Hence, although Grosseteste's concept of "contrary motion" would have been supported by his reading of Basil, his initial formulation and understanding of the principle would have resulted entirely from his own reading of Aristotle, particularly the *Physica,* in newly-translated Latin text. Direct application of the *Physica* is also the impetus behind the musical exemplification of contrary motion.

CHAPTER TWO

UBI LEX? ROBERT GROSSETESTE'S DISCUSSION OF LAW, LETTER, AND TIME AND ITS MUSICAL EXEMPLIFICATION

Ubi interrogatio, ibi lex, stated Augustine forcefully and clearly in his commentary to the fifty-seventh (58) Psalm, verse 2: *Si vere utique iusticiam loquimini, recte iudicate, filii hominum.* (Do ye indeed speak righteousness? Judge uprightly, O ye sons of men.) Augustine's commentary to this verse articulates a problem and an opposition. It is a powerful passage which sets forth a compelling picture of the fugitive, not from the law, but from his own heart. The conclusion to Augustine's discussion is simple and personal: to identify the law is to reinstate one's own person.[1] The commentary closes with a decisive statement. Wherever one looks, the law is there. But as men lust after what is outside themselves, they have been made exiles, and the written law was accordingly given. Hence, to these fugitives from the law, written upon their own hearts, which could have been comprehended and which could have called them back, the written law cries aloud. *Return, then, prevaricators, to your heart.*[2]

Where, and what, is the law; what is the nature and function of the law; and, most of all, how is the law a delineator and referent for a shaped concept of the personal, private individual? These considerations are obviously important to Augustine; all of them are treated in exhaustive detail elsewhere in Augustine's commentaries or sermons on the psalms. In his extensive comments to Psalm 118 (119), a psalm which relates the concepts of law and letter to the inner, private person, Augustine considers

---

[1] Augustine's commentary, quoted by Robert Grosseteste in *De cessatione legalium*, p.37: Cui enim iniquo non facile est loqui iusticiam? Numquis de iusticia interrogatus, quando non habet causam, non facile respondeat quid sit iustum? Quandoquidem manu formatoris nostri in ipsis cordibus nostris veritas scripsit: Quod tibi non vis fieri alteri non facies. Hoc antequam lex daretur nemo ignorare permissus est, ut esset unde iudicarentur et quibus non est data lex. Sed ne sibi homines aliquid defuisse quererentur scriptum est et in tabulis quod in cordibus non legebant. Non enim scriptum non habebant, sed legere nolebant. Oppositum est oculis eorum quod in conscientia videre cogerentur; et quasi forinsecus admota voce Dei, ad interiora sua homo compulsus est: *In cogitacionibus enim impii interrogacio erit.* Ubi interrogacio, ibi lex.

[2] Grosseteste, *De cessatione legalium*, p. 37: (the continuation of the passage quoted above) Sed quia homines appetentes ea que foris sunt, etiam a seipsis exules facti sunt, data es etiam conscripta lex; non quia in cordibus scripta non erat, sed quia tu fugitivus eras cordis tui, ab illo qui ubique est comprehenderis, et ad teipsum intro revocaris. Propterea scripta est lex que clamat eis qui deseruerant legem scriptam in cordibus. *Redite prevaricatores ad cor.*

the nature of law, of lawfulness, and of legality in its widest sense. Psalm 118, is the longest of the psalter, therefore, by virtue of its length alone, a psalm deserving of attention; but it is also Augustine's multifaceted preoccupation with abstract entities such as motivation, will, and the heart, seat of the personality and appetites, which led him to develop an extensive commentary on this particular psalm. The law is everywhere, he states, both within and without. His commentary on Psalm 118, an extension of his discussion of legality in Psalm 57, is exegetic and lyric. In both cases, as well as in many others, the psalms, and early Christian commentaries upon them, provided broad characteristic subjects for consideration and extension during the Middle Ages. This particular subject, taken up in both Psalms 57 and 118, of the relationship of law to writing and time, is worth pursuit because it became one of the major questions of the thirteenth century.

By virtue of length, subject matter, and authorship, Augustine's commentary on Psalm 118 provided an indispensable background for thirteenth-century discussions concerning law. In turn, the concept of law itself, with the further distinction between natural and written laws, brings up a whole panorama of pertinent topics: law, the person, the place and purpose of writing, the effect of time upon written law, as well as the bond between law and time. These topics, singly and together, created an exciting, energetic new climate for understanding and expressing the nature of music. Music was the ideal example of these intellectual regions. Its inner perceived laws, as well as outer written laws, found expression in time, for time was its material. Those especially sensitive to music's power, motivated by the discussion of law, letter, and time, would indeed find ways to indicate all three simultaneously in music notation. It is a fascinating union of intellectual motivation and sensory application in the early years of the thirteenth century.

As Augustine stated, the law is everywhere. The concept of law, therefore, brought up several fundamental issues. Commentaries on the biblical passages dealing with the concept of law call forth some of the most important questions of human existence. Thus, Augustine in his commentary on the 118th Psalm, which is about law, and later Robert Grosseteste in his treatise concerning the provinces, boundaries, terminations, and time relationships of law, namely, in the *De cessatione legalium*,[3] were not restricted to a narrow discussion of legality, but rather offer a thorough-going definition of law and letter. Eventually this

---

[3] All quotations from this work have been taken from Richard C. Dales and Edward B. King's recent edition, quoted above. The bibliography on the subject of law is immense. The purpose of this chapter is not to evaluate all of the nuances and changes that occurred in the large-scale discussion of this subject, but rather to point to crucial aspects, brought up by Augustine, further developed by Robert Grosseteste, which could be and were exemplified within the discipline of music.

consideration generates a comprehensive gamut of subjects, such as the meaning of *privacy*, of *sign*, as an external device which signifies, as well as the implications of *duration*, and, finally, the distinction between *precept* and *operation*. Both writers, Augustine and Robert Grosseteste, offer a landscape of fundamental questions. All of these questions could be exemplified, and, indeed, found exemplification, in the art of music.

Robert Grosseteste, in his monumental work on the subject of legality, *De cessatione legalium*, written between 1231 and 1235,[4] was influenced by Augustine's commentaries. He quotes them. He furthermore chooses Augustine's emphasis on law, letter, and person for his own. With a secure sense of direction, despite numerous quotations which show the comprehensiveness of his reading program, Grosseteste marches forward in this work, treating with clarity and understanding all of the most significant themes of the early university intellectual climate and logically relating them to one another. It is an ambitious agenda. He treats the subjects of natural, unwritten, moral, intrinsic law *versus* positive, written, ceremonial law, and the use and abuse of writing, the meaning of personhood, and the authentic personality. All of these subjects are approached and dealt with in Grosseteste's sure, vigorous writing style. Reading through *De cessatione legalium* can be compared to visiting all of the major cities of Europe within ten days. We will limit our consideration to the concepts of law, written communication, and time, which are crucial to his work.

It is exhilarating to observe how Robert Grosseteste proceeds, the subjects he addresses, the order in which the subjects are presented, and the topics to which he repeatedly returns. The comprehensiveness of his treatment of such a large number of relevant considerations, and the rapid pace of his arguments threaten to explode any thorough treatment of this work into fragments. The subject matter seems, in many cases, too high-powered for its own description. There is, however, a unifying thread which runs through the entire work: his concept of law, its types, functions, limitations, and expressions, as well as the tensions and oppositions the law produces by its ubiquitous presence. *Ubi lex*? asked Grosseteste, quoting Augustine. Everywhere, in fact, and rightfully so, since through the law nearly every consideration of importance can be accessed.

Not only are all of the facets of the law, chosen by Grosseteste for discussion, of interest, but the order in which he presents them as well.[5]

---

[4] See the introduction to *De cessatione legalium*, ed. pp. ix-xxx for a discussion of the date, purpose, and manuscript transmission of this work.

[5] See the introduction to *De cessatione legalium* (pp. ix-xx), for a discussion of the purpose of the work. It had, apparently, neither polemical nor reactionary purpose, in fact, no practical mandate at all, but rather formulated an inquiry into the substance of the law. This brings up, as well, a common misunderstanding of writing concerning music in the

With astonishing velocity Grosseteste proceeds from one aspect to the next, quoting from a broad range of authors. He, therefore, is both difficult to summarize and to quote, and, as the result, has been assumed to have had very little influence during his own lifetime.[6] Grosseteste commences with natural law, which is unwritten, therefore internal, private, instantaneously ascertained, and in need of no external manifestation.[7] It is law held *in communis*,[8] is continuous, without, as he states, the "interpolation of vicissitude."[9] Natural law is closest to that which is good.[10] Furthermore, natural law is essential,[11] informed, as it is, by the precept of love.[12] Written, positive law, the opposite of natural law, is secondary to natural law. Written laws require external, analogical signs which are always subject both to interpretation and the establishment of an authentic bond between the law itself and its written, corresponding sign.[13] In the specific case of the

---

Middle Ages, particularly in the thirteenth century, namely, that music theoretical treatises were written from practical motivation, rather then as an inquiry into the substance of music.

[6] See Richard W. Southern, *Robert Grosseteste*, especially p. 297. Southern's assessment, that Grosseteste's influence during his own century was minor, is based on the paucity of quotations of his work.

[7] See Brian Tierney, "Natural Law and Canon Law in Ockham's *Dialogus*," in: *Aspects of Late Medieval Government and Society: Essays Presented to J. R. Lander* (Toronto, 1986), pp. 3-24.

[8] See Brian Tierney, "Natural Law," p. 12, p. 14; Robert Grosseteste, *De cessatione legalium*, p. 17.

[9] Quod non completur rationali creature nisi cum pura intelligencia in lumine increato videt ipsum lumen increatum et, in racionibus creaturarum omnium increatis in lumine increato eternaliter expressis, videt etiam omnes creaturas, diligitque amore ordinato tam cognitum sine nubilo creatorem quam creaturas singulas et universas; huiusque diligentis cognitionis vel cognoscentis dileccionis, id est fruicionis, retinende sine vicissitudinis interpolatione, sine diminucionis remissione, sine termini finicione habeat firmissimam certitudinem. *De cessatione legalium*, ed. p. 17.

[10] ...et quod etiam utramque legem scriptam debuit antecedere lex naturalis non scripta, paulo altius exordiendum videtur. Dicimus itaque quod omnis creatura rationalis naturaliter appetit esse beata (ed. p. 17). Quod autem primitivi homines, licet habuerint ex peccato sensuum omnium multam corruptionem, habuissent tamen comparacione nostri temporis multam sensuum interiorum et exteriorum firmitudinem et vivacitatem patere potest ex eorum longevitate et corporali robore. Longevi namque fuerunt ex bonitate virtutis naturalis, fortes vero robore ex bonitate virtutis vitalis et virtutis motive. Sed harum virium bonitas esse non potest absque bonitate virtutum sensitivarum (ed. p. 35).

[11] Preceptorum vero primi generis, id est essentialiter iustorum, ideoque preceptorum tota collectio est lex naturalis. Essentialiter enim et naturaliter iusta est et naturaliter congruit unicuique rationali creature illam perficere secundum actus speciei sue congruentes (ed. p. 21).

[12] Lex enim naturalis, quia tota ordinate et necessario consequitur ex precepto caritatis, facilis est naturaliter retentionis (ed. p. 35).

[13] A sign is never as efficacious as that for which the sign stands. Further, analogical bonds are the weakest kind of relationship, relying, as they do, on comparison, and subject to the establishment of an authentic connection at every level of the two items compared. Here, the important, extensive, multivalent medieval discussion of intellection has been deliberately avoided in order to avoid confusion in dealing with the subject at hand, and because it is treated below.

Biblical scriptures, God has instituted the relationship between law and written sign, since he has instigated the law. Nevertheless, natural law, by every count, is superior to positive, written law, and, in the case of positive law, there is the possibility that written laws are superfluous. If this is so, what, then, are written laws good for? What is writing's special province of usefulness? What is the function of written law; what do laws express; how does one keep, sanctify, or properly fulfill the law? These questions were, of course, not only relevant to Grosseteste and his contemporaries; they remain key issues for Christian believers today. They were certainly considerations, not only for medieval Christians of the thirteenth century, but throughout the history of the church. Furthermore, the problem of *natural* over *positive* law brings up an even more basic consideration, namely, the validity and purpose of writing itself, as well as the question of whether writing is in any way to be preferred over either intuition or that which one has always known.[14]

First, in answer to the question of the validity and usefulness of writing, written laws invoke discrimination, distinction, and stabilization. Grosseteste, in this context, mentions the relationship between perception of law and the vacillation of an infirm mind, as well as the poverty and paucity of both ingenuity and memory, which such a mind exhibits.[15] On account of both the poverty and paucity of ingenuity and memory, written law was instituted by God. Secondly, written laws are similar to a scale in that one can see where one has been and where one is eventually going. Writing, therefore, invokes the possibility of continuous processionality upon which discipline is based: "The written law is a lively way of growing discipline," to lend to the English translation some of the color of Grosseteste's formulation.[16] Some writing is plainer than other writing. Grosseteste remarks that, scripturally speaking, passages which deal with matters of life and death, of eternal destiny and redemption, are outside the

---

[14] Intuition is instantaneous, writing, procedural. Robert Grosseteste appears to have been, over many years, interested in the contrast pair formed by the instantaneous, indivisible, and complete perception *vs.* procedural, step by step, successive acquisition of knowledge, a subject to be treated in more detail in the chapters which follow.

[15] Quia ergo sentencie sue errorem tam auctoritatibus quam argumentis fallacibus potuerunt astruere, quibus argumentis et auctoritatibus etiam adhuc posset fides in infirmorum mentibus vacillare, ponemus quedam que eorum sentenciam videntur confirmare, prout occurent parvitati et paucitati ingenii et memorie nostre. Quibus pro modulo nostro positis et in suis locis solutis, ponemus etiam quedam que hunc errorem improbent, et legem per Christi graciam evacuatam esse confirment (Grosseteste, *De cess. leg.*, p. 7).

[16] Et quia actum egrediendi non potuit homo excercere nisi ipse in hoc motu super aliquid velud super gradatim sustinens inviteretur, oportuit ut scala legis naturalis ei dimitteretur. Et quia per longam moram in puteo cecuciebat, et qui ambulat in cecitatis tenebris nescit quo vadit, congruebat ut lex naturalis adhuc splenderet in lucerna scripcionis; lex enim scripta simul est scala et via ascensionis et lucerna. Unde Salomon in Parabolis ait: *Mandatum lucerna est, et lex lux, et via vite increpacio discipline* (Grosseteste, *De cess. leg.*, p. 44).

ordinary modes of scriptural interpretation, forming a category of writings for which no doubt can exist concerning their message. These are texts *in planis, sine allegoria planissime, ad plenissimam quoque manifestacionem significacionis rerum*, and *verbo pleno*.[17] Not all texts among the Biblical scriptures are, in fact, equal. Various senses are used in the scriptures, but when the laws of love, that is, dealing with salvation, are explained, they are done so *idem verbis nudis sine allegoria*, that is *planissime*. It is of interest that the term *cantus planus* makes its first appearance during this period, in writing concerning music.[18] Finally, written laws are necessary "so that which is written will not be forgotten."[19] This final statement of the functionality of written laws is a clear mandate for writing, and one which transcends the temporary nature of some particular written laws. Grosseteste's comprehensive discussion of legality raises several questions. What, for example, were his sources; and what was his sphere of influence? In which respects was his approach consistent with that of other contemporary writers; and in which ways does it diverge from his own intellectual environment? In other words, how does Grosseteste's perception of law differ from a long-standing tradition? Grosseteste's sources are multiplex, but he returns frequently, at crucial points, and in lengthy detail, to Augustine's writings, particularly to his commentaries on the psalms,

---

[17] Quapropter manifestum est quod divina scriptura salutis humani generis prenuntiativa composita est sic: ut in quadam sui parte per verba significet huius mundi creaturas et species per quas intendit secundo significare nostre reparacionis dispensacionem, et in alia sui parte significet actus et conversacionem populi Israel; per illos iterum actus et illorum conversacionem intendens signare nostram reparacionem. Et in hiis duabus partibus significant verba primo loco res, sed ibi non sistit signantis intencio, quia intendit ultra per res primo verbis signatas, signare secundo aliquid quod ad humani generis pertineat salvacionem. In tercia vero sui parte signat hec scriptura ad nostram salutem pertinencia verbis nudis, nichil habentibus allegorici enigmatis. In quarta vero parte continet prophetiam, que tum prophetat nostre salutis misterium verbis nudis, tum prophetat illud rebus per verba signatis.

Et, sicut dicit Augustinus et ex predictis etiam patet, hec scriptura sic composita est ut quicquid de nostra salute significat per res allegorice, significat etiam illud idem verbis nudis sine allegoria planissime (Grosseteste, *De cess. leg.*, p. 49). Habet igitur auctor huius scripture hoc optimi doctoris proprium quod hoc intendit docere per suum verbum, quod per idem verbum est manifestissime signatum. Verbum enim allegoricum absque coaptacione sui ad verbum nudum euisdem allegorici explanativum non est sicut verbum docentis plenum, sed sicut verbum decurtatum. Solo autem decurtato verbo non intendit magister bonus informare discipulorum intellectus, set verbo pleno (Grosseteste, *De cess. leg.*, p. 51; the topic of texts *in planis* will be treated more thoroughly below).

[18] *Musica plana* appears, for example, in the incipit to Johannes de Garlandia's music theoretical treatise (early thirteenth century): Habito de ipsa plana musica, quae immensurabilis dicitur, nunc est praesens intentio de ipsa mensurabili, quae organum quantum ad nos appellatur, prout organum generaliter dicitur ad omnem mensurabilem musicam (Erich Reimer, *Johannes de Garlandia: De Mensurabili Musica*, 2 vols. [*Beihefte zum Archiv fuer Musikwissenschaft*, X, Wiesbaden, 1972] I, p. 35).

[19] Grosseteste briefly discusses, in this context, an apostate theory of the insufficiency of inner law. By using one's own free will, one believed only what could be seen (cf. Grosseteste, *De cess. leg.*, p. 26).

and, in one case, to make a key point, to the correspondence between Augustine and Marcellinus.[20] In returning to Augustine, Grosseteste establishes a significant connection which he maintains throughout the work. This is a relationship between written law, the letter or significatory sign, and, most importantly, time:"Item, secundum Augustinum, duplex est lex: temporalis videlicet, et eterna. Et illa que temporalis est iuste potest commutari per tempora. Eterne vero legi semper est obtemperandum."[21]

According to Augustine, there exist two types of law, that related to time, and law that is eternal. Grosseteste's fascination and preoccupation with temporal things versus permanent, and their relationship to the inner, private individual are evident throughout *De cessatione legalium*. It is a subject matter, however, that is neither original, nor unique, to Robert Grosseteste, but, rather, an Augustinian preoccupation which informs his intellectual environment.[22] The duality: *Duplex est lex*: *temporalis videlicet, et eterna* expresses one of the chief intellectual problems of the century. This is the reason that Grosseteste both uses the quotation as an introduction to extended discussion and returns to the problem again and again.

In this problem of *time*, Grosseteste found an opportunity to coalesce a vital traditional problem with a new discovery. The traditional problem dealt with the interaction of the temporary and the eternal—the changeable and the permanent—as exemplified by the decalogue, articulated by Augustine, as well as in the biblical scriptures.[23] The new problem that developed in the university climate of the thirteenth century presented the juxtaposition of simultaneity and the successive, or that which can be spontaneously, instantaneously perceived versus the progressive and processional. Both concepts, as well as their juxtapositions as opposites in order that each could be understood, were of obvious interest to Grosseteste. Natural law, on the one hand, is private, inherent, autonomous, as well as simultaneously and spontaneously perceived. When God speaks within, there is no doubt as to what he has said. Revelation is simultaneous, autonomous, and spontaneous. Natural law, hence, could be associated with the single particular event. It could be simple, therefore easily retained,

---

[20] Cf. Grosseteste, *De cess. leg.*, p. 10f.

[21] Cf. Grosseteste, *De cess. leg.*, p. 10, a passage which, extended, brings in two additional concepts: *ante legem* et *in lege* et *post legem* in decreto apostolorum (*De cess. leg.*, p. 11), and *nexus vitales* ex quibus est vita vestra coaugmentata atque composita (p. 12).

[22] Grosseteste's participation in an expanding vocabulary of legally oriented terms may be seen in his use of *authenticus*, used, for example, by Matthew Paris, *Chronica maiora* a. 1237 (ed. H. R. Luard, Rolls Series [1872-84], III, p. 438).

[23] Grosseteste frequently quotes both Old and New Testaments concerning the permanence of the law, as, for example: Nolite putare quoniam veni solvere legem aut prophetas: non veni solvere, sed adimplere (Grosseteste, *De cess. leg.*, p. 12), and: Donec transeat celum et terra, iota unum, aut unus apex non preteribit a lege (p. 13).

without being written down. Natural law is summarized in the precept of love.[24]

Time presented an opportunity for Grosseteste to coalesce a traditional problem with a new one. Natural law is identified with a single particular event; positive, written law with process, which follows, step by step, a successive, logical course of events. Intuitive, spontaneous, natural law is clear; but written scripture requires interpretational senses which must be used in a series of mental and physical steps. Grosseteste, in many contexts, contrasts consecutive measured time-lapse with the instantaneous, or the simultaneous with the successive. There are many contrasting instances of this time duality. For example, Christ's work of fulfilling the law was instantaneous. Grosseteste writes: "For one knows by experience that it is utterly impossible to rise up [from the dead] by means of an ascending scale of free will, for it is not proper to free will itself to enable one by this ladder to ascend out of the very swamp of sin."[25]

This consideration of instantaneous natural law and processional written laws, as well as their operational vigor brings Grosseteste to the concept of timing and law. Time and length of duration dictate whether a law is preceptive or operational; whether it has validity for all time, is, so to speak, *beyond* time (*ultra mensuram*), that is, preceptive, or whether it is temporary and operational. Keeping the law of the sabbath comes up regularly as an example of the latter, that is, an operational law. Its inner concept of obedience to God was given and remained for all time. This is the natural, immediately perceived, simultaneous aspect of this particular law. The operational, positive, written aspect, set forth in the law of the ten commandments, is temporally determined and subject to the successive process. Precept, therefore, is without time-measure; operation, however, is measured by and within time.[26]

---

[24] Cf. Grosseteste, *De cessatione legalium*, ed. p. 34f.

[25] The entire context follows: Persona igitur cui proprie data est ad liberationem Christi passio est velud aliquis homo qui se precipitasset in profundum et obscurum puteum; de quo puteo non posset evadere vel proprio conamine vel aliquo iuvamine nisi unius solius. Ymaginemur itaque hominem unum lapsum in profundissimum puteum et ymaginemur alium qui solus posset extrahere lapsum, nec egeat in extrahendo ipsum aliquo iuvamine extrinseco. Et ponamus insuper quod totum gaudium et totum bonum extracti esset cognicio et amor extrahentis ipsum (Grosseteste, *De cess. leg.*, p. 41). Ex huius itaque rei comparacione, manifestum est quod Dei Filius non statim post hominis lapsum debuit dare redemptionis beneficium, sed debuit homo lapsus in peccati puteum prius relinqui proprio conamini, ut sciret etiam experientia quod non posset resurgere per solum liberum arbitrium. Debuit quoque velut scala quedam ad ipsum deorsum mitti lex naturalis, in qua singula legis mandata sunt, velud singuli gradus ascentionis in scala, ut experiretur quod nec proprio per liberum arbitrium conamine posset per hanc scalam de puteo peccati ascendere (p. 42).

[26] Cf. Grosseteste, *De cessatione legalium*, p. 56: Unde si non habent legis vigorem nisi ad tempus, qui facit ea tanto tempore quanto stant verba in vigore legis, licet non ultra faciat ea, vere dici potest in verbis legis permansisse. Quod si ultra faciat ea, non ideo permanet in verbis legis cum iam non sint verba legis, sed forte magis contra legem facit quod legis

Grosseteste writes that keeping the text, that is, the *littera*, of the law outside of the *time* of the law is, in reality, against the law. The law only retains its vigor when applied *ad tempus*. An example of this would be the simultaneous observance of both circumcision and baptism. Essence preempts the external; an energy of precept evacuates the outer, significatory sign. As the essential becomes manifest in one single perception, external signs are no longer necessary. This implies that signs have vigor and that this sign-energy is time-related. As Grosseteste carefully prepares his discussion of the relationship between time and law, several concepts are brought up and explained, one after the other. All of his arguments deal with his nexus of law, writing, and time. His conclusion: time and the redemptive work of Christ have altered law, that is, the necessity for written law. The Word itself is *sine littera*. In view of this comprehensive discussion concerning writing *ad tempus*, the precept *sine littera* and *ultra mensuram-ultra punctum*,[27] we should not be surprised to find identical concepts and formulations employed in a musical context. The treatise of Edmond de Coussemaker's "Anonymous IV," written at approximately the same time as Grosseteste's *De cessatione legalium*, and, in all likelihood, in the same geographical place, is filled with Grosseteste's vocabulary as well as the considerations he emphasizes.[28] Precisely those aspects which were, apparently, most important to Grosseteste could be and were, in fact,

---

vigorem habere iam desiit. A topic related to the adherence of law to time—almost as if "law" were glued to a moving belt—is the principle of accommodation, discussed by Amos Funkenstein in "Accommodation and the Divine Law," *Theology and the Scientific Imagination* (pp. 222-243). Both the adherence of law to time and the principle of accommodation imply chronological boundaries that have been set for the usefulness of a given law.

[27] Time concepts and dimensions abound in Grossetete's discussion of law; "Hic iam si satis consistit, quod recte alio tempore constitutum est, itidem recte alio tempore posse mutari, mutantis opere, non disposicione mutata, quam disposicionem intelligibilis ratio continet, ubi sine tempore simul sunt que in temporibus simul fieri non possunt, quia tempora non simul currunt: quispiam fortasis expectat causas a nobis ipsius mutacionis accipere, quod ipse nosti quam prolixi negocii sit..."Hec itaque est Augustini responsio ad opposicionem positam in epistola Marcellini (Grosseteste, *De cess. leg.*, pp. 63-64).

[28] Samuel Pegge, Grosseteste's eighteenth-century biographer, suggested that the *De cessatione legalium* was written by Grosseteste around 1231, a date given by the editors of this work as the earliest possible. They suggest 1235 as a *terminus ante quem*. The treatise shows an acquaintance, but no profound knowledge of the Greek language. (See the introduction to *De cessatione legalium*, pp. xiv-xv.) Little is known concerning either the person or the work of Anonymous IV, but many of the individuals mentioned or discussed in his music treatise were active during the period 1228-1237. One, Blakesmit, cantor in the court of Henry III (1216-1272), mentioned by the anonymous author, is otherwise unknown to music history. (See discussion of this aspect above.) The principal manuscript of Anonymous IV's treatise has long been associated with, and in the possession of the abbey of Bury St. Edmunds. Henry III was, during this decisive period of Grosseteste's life, Grosseteste's patron. Grosseteste was born near Bury St. Edmunds, and may even have been raised by the monks of that abbey. At any rate, his personal association with the abbey was life-long. (See Richard W. Southern, *Robert Grosseteste*, p. 3-5, p. 262.)

exemplified in musical terms. It is especially interesting that *De cessatione legalium* and the anonymous treatise on music have a common organization. Time is essential to both works. Successive time relationships are treated in the first chapters of both treatises. This consideration of *successive* relationships, in the case of the musical treatise, by the ongoing time differentiation of rhythm, is followed by several chapters concerning *simultaneous* temporal relationships, or the regulation of tones occurring together. Music adheres to time. Its substance is in time, but its constructive precepts stand before and outside of time.[29] Further, Grosseteste's conclusion that time changes laws could be exemplified in music, since music changes *in* time and is changed *with* time. Music, therefore, most adequately expresses the flow of time, as well as the mutation effected by the passing of time. It also exemplifies the preceptual portion that remains the same. Its fundamental laws regulate the placing of notes, one after the other, as well as one with the other—the simultaneous aspect comprehensively treated for the first time in this century. Music further exemplified the phenomenological, operational aspect which was constantly changing by virtue of the fact that change was appropriate to music's very nature. We will return to these dimensions of music's analogical ministry.

As we have noted, there are two types of laws, that is, that which is eternal, and remains, and the law that is temporal and transitory.[30] In discussing this duality, Grosseteste adds one time-concept to the other. As one proceeds through *De cessatione legalium*, one moves *in* time, *out of* time, and endeavors to understand *concurrent* times. Simultaneity, specifically, incites Grosseteste to quote Augustine.[31] Grosseteste's answer to an apparently irreconcilable dilemma is that God does not negate or dissolve law, but perfects it. In this context Grosseteste also introduces the dual concepts of *property* and *perfection* in his investigation of Christ's work of fulfilling the law, in that a progression takes place in the resurrection of the body by which natural properties of the human body are

---

[29] Music most clearly expresses the difficult concept of a principle adhering to time, discussed by Augustine and Grosseteste: Aliud enim precepit quod huic tempori aptum esset, qui multo magis quam homo novit quid cuique tempori accommodate adhibeatur; quid quando impertiat, addat, augerat, detrahat, augeat minuatve immutabilis mutabilium sicut creator ita moderator, donec universi seculi pulchritudo, cuius particule sunt, que suis quibusque temporibus apta sunt, velud magnum carmen cuiusdam ineffabilis modulatoris excurrat, atque inde transeant in eternam contemplacionem speciei qui Deum rite colunt, etiam cum tempus est fidei (Grosseteste, *De cess. leg.* p. 62).

[30] Cf. Grosseteste, *De cessatione legalium*, p. 65: Consimiliter, ut patet ex predictis, duplex est genus legis: unum quod est sempiternum et manens, ut: *Diliges Dominum Deum tuum ex toto corde tuo et proximum tuum sicut te ipsum*; alterum vero quod est temporale et transiens, sicut lex circumcisionis et sabati et cetera cerimonialia.

[31] Grosseteste, *De cessatione legalium*, pp. 63-64, quoted above.

"conducted to perfection" by the redemptive work of Christ. Christ, in effect, resolved the duality of eternal *vs* time-based temporal law.[32]

In a few succinct chapters, Grosseteste presents an entire vocabulary of concepts and terms. These terms are presented in his discussion concerning the relationship of Old Testament positive, written, ceremonial law to the New Testament law of love which is simple, natural, and does not require written form as a mnemonic aid. Both the problem and the ensuing relationships presented are universal and fundamental. Grosseteste explores the nature of legality and its connection to the onward movement of time. In so doing, he also reconciles traditional literature concerning the interaction and relationship between Old and New Testaments as set forth by Augustine, the biblical scriptures, of which he had intimate and extensive knowledge, and his own reading of newly-available texts. His motion concept, as well as the idea of progression according to the path of one's own natural properties to a conclusion, would have been impossible without acquaintanceship with the new Aristotelian learning. Hence, Grosseteste's *De cessatione legalium* brings together the work of Jerome, Gregory the Great, Iohannes Scotus Eriugena, Paschasius Radbertus, Anselm, Peter the Lombard, William of Conches, and, especially, Augustine with fundamental Aristotelian principles. The work is an example of just what Grosseteste eventually discusses: *reconciliation.*

What is the nature of Grosseteste's "legality?" First, his concept of natural law is that it is singular, strong, intuitive, and quintessential, all of which, he states, are fundamental to a capacity to discriminate. This is not an uncertain groping towards what can be best explained in psychological terms, namely, that natural law is a hidden, authentic consciousness; but, rather, that Grosseteste is looking for the motivational force behind an ability to make distinctions. He notes that there is a relationship between the perception of law, or the lack thereof, and the vacillations of the ineffective intellect, a mind that cannot possibly come to decisions. Written law, communicated by signs, was instituted by God to remedy a lack of ingenuity and memory. Signs, therefore, occur early and frequently in Grosseteste's discussion. Positive, prescriptive, written laws, rising out of infirmity and necessity, are secondary to unwritten, natural law. In spite of

---

[32] Grosseteste, *De cessatione legalium*, p. 64: Ad solutionem autem illius oppositionis facte ex eo quod Dominus venit non solvere legem sed adimplere, distinguendum est quod duplex est genus rerum: unum videlicet cuius esse est esse permanens, et aliud cuius esse est esse transiens...Sic adimplebit et non solvet corpora nostra in generali resurrectione. Adimplere vero et non solvere rem cuius esse est esse transiens est perducere illam per progressus suos naturales usque ad terminum consummacioni transitus sui naturaliter congruentem, nec citra terminum ei convenientem illam rescindere, nec ultra talem terminum illam protendere.

writing's inferior position it is necessary in order to construct a history of law.[33]

This subject of past, present, and future law brings up timed law, or legal temporality, not, of course, a new concept, since Augustine had suggested, in more than one context, the concept of an apostolic *nexus* before, in, and after time. The vitality of some laws, then, depended upon their relevance to, and congruence with, a particular place in time. One could say that these laws were bonded to time. In addition, inseparable unification was also, at any moment, possible between permanent law and particular passing moment, that is, between precept and operation.

For Grosseteste, the entire complex of problems is much more than an academic presentation of a thesis, containing an exposition, a developmentary section with arguments *pro* and *contra*, and a conclusion. It was, in fact, more than his own attempt to bring an inherited past into association and reconciliation with the cataclysmic intellectual currents of his time. Grosseteste, as a Christian believer, was, in a profound sense, fighting for a clear personal concept of the importance and significance of the law for his own spiritual life. He was, furthermore, reviving the early Christian dilemma of the reconciliation of Jewish commandment with Christian liberty. Begun by the apostles Peter and Paul, it had remained a central issue of the church, and, to some extent, every Christian believer. The sabbath, not only for Grosseteste, but for all Christians, is representative of the problem at hand. Should Christians set the day apart, faithfully attend church, deliberately avoid going about their normal everyday activities, generally and conspicuously desist from pursuing all means by which they earn their livings and maintain their livelihoods? In other words, the sabbath, also for Christians, was to be a day of rest, which was very much like the Old Testament sabbath in the sense that it was a law to be obeyed. Further decisions as to what rest signified, what one did when one rested, whether the mind, or the body, or both should be rested, and how this should be accomplished had, of course, led to a ponderous corpus of subsidiary laws, from Old Testament times to the present.

Was one to scrupulously follow, for example, the ten commandments to the letter, or was one to adhere to the law written upon one's own heart, the

---

[33] Et quia qui testificatur aliquid alius est ab eo cui testificatur, oportuit ut non totum humanum genus per actus suos voluntarios et vite conversacionem testificaretur reparationis humani generis misterium, sed ut hec testificatio esset posita specialiter in aliquo uno populo qui per actus suos et vite conversacionem hoc testificaretur generi humano, ideo ad hoc ministerium electus est populus ille de quo Christus fuit nasciturus. Hoc enim erat congruentius, et propter hoc illius populi tota vita et conversatio fuit prophetalis, et testificativa nostre per Dei Filium reparacionis. Et quia actus hominum voluntarii non possunt sciri, nisi per sensum aut per hystoriam—hystoria autem non transfertur ad posteros certa, nisi per scripturam—oportuit ut illius populi vita et conversacio prophetalis nostra salvacionis in autenticam redigeretur scripturam (Grosseteste, *De cess. leg.*, p. 48).

arbitrating, but simultaneously liberating, unwritten law of love? It is not by any means astonishing, in view of the seriousness and relevance of the subject, as well as its centuries-old tradition, that Grosseteste wrote a major treatise, carefully, at times passionately, arguing for his position with respect to the problem. His conclusion to the dilemma between God-given written law, prescriptive for every area of life and thought, versus the single, but even more inclusive, unwritten law of love, set forth by Christ, is that Christ himself has the capacity to *conduct* the Christian in a way totally congruent with his individual natural *properties* to the *perfection* of this law.

Grosseteste's discussion in its totality, as well as in its single parts, sets up musical exemplification as the most appropriate means of obtaining understanding. Musical analogies necessarily complete his arguments. The topics he brings up, as well as the ways in which these topics are developed, require musical counterparts which grant them a much-needed concrete, actual, perceptual dimension. Grosseteste's preoccupations call out for musical applications. At the apex of his main point concerning the resolution of the law in Christ's work, he himself uses a powerful musical analogy; music alone exemplifies concordance in dissonance, as well as dissonance with consonance.[34] Further, it should be kept in mind that, at the time of Grosseteste's discussion of consonance, the simultaneous occurrence of several musical tones, ordered by principles of consonance and dissonance, both as a heard phenomenon, and as a theoretical discusssion arena, was new.

Grosseteste, in *De cessatione legalium*, presents a *nexus* of concepts and terms basic not only to his own inquiry, but, as we shall see, to writing about music in the early thirteenth century. Both the concepts and terminology occur in contemporary music treatises. The relationship between conceptual explanation, delivered in Grosseteste's *De cessatione legalium* and direct musical exemplification, presented in a contemporaneous anonymous treatise on music occurs in four areas. Music's capacity to bring abstractions to sensory perception can be seen in music theoretical discussions of 1) substance authentically related to sign in writing, or *figura-modus*, 2) in time measure and the presentation of kinds of rhythmic gestures by which time is controlled and given characteristic format, 3) in

---

[34] Grosseteste, *De cessatione legalium*, pp. 164-165: Non solum ergo per fistulas tales resonat ille artifex concordem concordiam, sed et concordem discordiam et discordem concordiam, cum discors concordia sit modulatio armonica artificiosa. Omnes enim preter equalitatem consonancie musice, ut diapason et diatessaron et diapente, sunt discordes concordie sed, sicut accidit auditui gravi corporali duabus fistulis discordanter concordantibus, discordiam esse manifestam et concordiam latentem, sic accidit et duro auditui mentis nostre harum spiritualium fistularum discordiam esse patentem, latente que subest temperata concordia. Manifesta igitur resonat in hiis vocibus discordia...For Grosseteste's musical aptitude and interest see also Southern, *Grosseteste*, pp. 209, 231-232, 318.

the mention of demonstration—"show plainly"—or *cantus planus* and the use of the term *simplex*, and, finally, 4) within the discussion of *proprietas* and *perfectio*. An assimilation of intellectual background results in a music-notational terminology. To pursue these relationships between philosophical-theological discussions and music-terminological exemplifications: Anonymous IV's music treatise repeatedly invokes the idea of figures in written communication. Figures are related both to material and to time. In several contexts, the writer of this treatise initially brings up inner, musical property or law, relating it to outer, figural sign, or composite signs, that is, *ligatures*, which contain their own properties and exist within time. (Example: Notational *figurae* show proprietas by their initial *figura*, perfectio by their concluding *figura*, as below.)

Figures, bonded to inner laws, plainly show the successive flow of sound within time. There is a lively bond between permanent underlying musical order and the order of sound made visible by means of joined figures.[35] (It should be kept in mind that *law*, *ligature* both have the same Latin root.) Written sound, shown by notational figures, is inseparable—in some respects indistinguishable—from time. Anonymous IV writes of *modes* of time.[36] Finally, the concepts of *proprietas* and *perfectio*, mentioned in this music treatise, make little sense unless one has the background contained in *De cessatione legalium* firmly in mind.[37]

---

[35] *Anonymus IV*, ed. p. 23; see also p. 36: Omnibus computatis quae possunt computari prout numerus, pes, figura, coniunctio disiunctioque sufficienter conveniant; as well as p. 45: Figurarum simul ligatarum quaedam dicuntur cum proprietate propria a parte sui principii, quaedam sine proprietate, quaedam cum opposita proprietate etc., prout in quodam libello vel tractatu plenius invenitur, cuius inceptio est: *Habito de ipsa plana musica* etc. Et notandum, quod quaedam figurae accipiuntur sine litera et quaedam cum litera; and p. 47: Ergo ex ipsis non fit ligatura materialis, sed per reductionem longarum et brevium solo intellectu iuxta aequipollentiam bene ligantur.

[36] Cf. *Anonymus IV*, ed. p. 22. These modes of time consist of contrast-pairs of relative duration, as mode I: long short, mode II: short long, mode III: long, short long, mode IV: short long, long, mode V: long long long, mode VI: short short short. They are rhythmic generational arrangements which can easily be sung by the human voice, which are found in the majority of songs, even today.

[37] Cf. *Anonymus IV*, ed. p. 25.

The connections proposed here rely on more than a similarity of vocabulary which can be noticed by doing essentially lexicographical work. A structure and a relationship between the type of text required by a certain subject area and its completion within another subject area have been presented. It would have been absurd for thirteenth-century writers, who were well-acquainted with their reading audiences, to restate basic underlying principles each time they developed one of these principles, or, having stated these principles, to discuss all of their possible analogies. For Grosseteste to mention musical analogies in the thorough manner with which the anonymous author discusses them would have been out of place in a work already as rich in problems as *De cessatione legalium*.[38] On the other hand, for Anonymous IV to explain what *proprietas* and *perfectio*, *actus*, *operatio*, *figura*, and *intellectus*[39] signified, useful as this might be to us, would have been absurdly tedious to his audience, since these concepts would have already been well-known, from, for example, Grosseteste's treatise. His audience would have brought much to their text. Writing concerning music often appears to be lacking in intellectual substance. Anonymous IV's treatise plainly requires an intellectual background, namely, that provided by Grosseteste's *De cessatione legalium*. The connection between Grosseteste's *De cessatione legalium* and Anonymous IV's treatise on music is precisely the connection between Aristotle's *Metaphysica*, with its detailed elaboration of basic principles, and other treatises by the same author, such as the *Physica*, *Ethica*, and *Poetica*. Accordingly, following this model, explanations of a problem, or an entire intellectual cast that gave rise to the problem, occur in a comprehensive treatise on law, legality, and time. Precise expressions and concrete exemplifications within the art that directly applied law to time occur in Anonymous IV's music treatise. This fact is shown by the frequency with which the expressions "show plainly," "demonstrate," and "make more plain" are used.

Writing using music subject matter has a different purpose in the thirteenth century than music theory today, which is practice-oriented and understood from the standpoint of several centuries of primarily instrumental

---

[38] To include both basic principles and musical analogies, or applications of these principles, would also have been, to Grosseteste's way of thinking, methodologically impossible. See Amos Funkenstein, *Theology and the Scientific Imagination*, p. 6: Finally, the barriers separating various scientific disciplines were fundamental to the peripatetic program of systematic knowledge. Within the Aristotelian and Scholastic tradition, it was forbidden to transplant methods and models from one area of knowledge to another, because it would lead to a category-mistake.

[39] See *Anonymus IV*, ed. p. 27: Sed distinguendum est, quod tria prima puncta distinguuntur per unum et duo coniuncta, si fuerint in diverso sono; quod si fuerint in eodem sono, non coniunguntur actuali coniunctione penes materiam, sed subintelliguntur coniungi. Alia tria coniunctim se habent semper aut *actu* vel *intellectu* penes *materialem coniunctionem* (italics added).

performance. What difference does an instrumental outlook make; what inroad on the musical consciousness of historians of music has a predominantly instrumental training made upon them? First, one is much more inclined to understand music for its own sake, autonomously, and without deep connection either to word or, most of all, to a complex of concepts. Second, one views music as a concert tradition, to be listened to, absorbed, and reacted to as *music*, not as the expression of otherwise extremely difficult ideas. This thirteenth century attitude of placing music, particularly its visual aspect, or notation, in an analogical position to a concept is totally foreign, not only to music makers or performers of the twentieth century, as, perhaps, has always been the case, but, more significantly, to historians of music as well. Of one thing we can be certain, however, both Robert Grosseteste and Anonymous IV were aware of both sides of the equivalence; and they were able to balance the relationship between the complete discussion of a fundamental concept within one type of treatise and its terminological protuberance within the other type of treatise. In the case at hand, the complex of law-sign-time is explained step by step in *De cessatione legalium*. Key concepts are given focus, granted precise terminology, as well as musical relevance and concreteness in Anonymous IV's treatise. The treatise, as well as the author, have no names.

The question could be raised, if Grosseteste had musical exemplification in mind why did he not go one further step and say so? Conversely, if Anonymous IV understood far more in terms of a general intellectual background than he transmits in his treatise on music, why does he not spell this out? It would, of course, make matters far easier for us. But in asking that our way to understanding both *De cessatione legalium* and Anonymous IV's treatise on music be made easier, we have not taken into account the character of medieval treatises and how they differ significantly from modern textbooks, which are far more self-contained and autonomous. Music was a ministry, or helping discipline, as Grosseteste states.[40] It enabled one to understand basic principles. The appeal to these ordering principles, to the concept of procedure, and music's capacity to "show plainly" appears in varied formulation within nearly every sentence of Anonymous IV's treatise. We have before us a collection of *exempla* in sound, sensorally presenting the connection between principle and written sign-time in its processional flow and perceptible degrees of measurement. Further, professional academic alignments also did not exist in the same way in the thirteenth century as they do today. One is channelled early into a disciplinary track which dictates the material and viewpoint of one's

---

[40] See Grosseteste's *De artibus liberalibus*, ed. Baur, p. 4.

education leading to the Ph.D., culminating with the dissertation. This disciplinary channel is further reinforced by specialist guilds or professional societies. Medieval treatises on music, however, were not written by musicologists.

Writing concerning music was based on the service it was expected to perform. The questions raised and answers received, as well as the material presented become obvious when the purpose of music writing is taken into consideration. An analogy exists between explanation or intellectual background, on the one hand (for example, in Grosseteste's writing), and music exemplification and terminology. The word or term used in writing concerning music stands as an analogy to complete explanations in other fields. Or, to put it another way, the duality *property/perfection* occurs as terms in other fields, but is exemplified in a particular way in music. The level of intellectual substance is high in "explanatory fields," exemplary-analogical content in music-writing. This is seen by the emphasis in music-writing on the practice of writing itself, the use of words such as *figuratur, notantur.*

In summary, legality itself is an exterior sign. It should not be necessary since sensitivity, will, and discretion always supersede rules. A cultivated, sensitive, mature personality, that is, in Grosseteste's terms, an authentic personality, does not need rules. By implication, the mature Christian also no longer requires external mandates. Rules, writing, and written prescriptions have an office, that is, a designated obligational arena. The efficacy of this office, however, is timed and dependent upon time. This concept and relationship is set forth by Augustine in his two types of laws. This, then, is the reason for a cohesive relationship between law, writing, and time. The elucidation of this relationship, which, though highly significant, is not immediately apparent. The relationship has coincidental exposition in writing concerning music, since all three aspects, natural law, written law, and time, could be clearly apprehended in music. Both discussions are necessary and mutually referential. In order to understand these writers on music, one must be aware of their conceptual background, and, conversely, one's grasp of the implications of this thirteenth-century concept of legality is greatly enhanced by observing its outworking in the sensory-intellectual experience of music.

Music notation exemplified inner law, outer letter, the inner content of laws related to external forms of writing, and their cohesion to, and with, time. Music notational language seizes upon the same expressions used, as we have seen, by Robert Grosseteste, as, for example, *proprietas, perfectio, simplex, planus, figura, modus*, and exemplifies them in musically significant signs. Identical expressions used in dealing with music and in intellectual areas outside music evoked, for a unified intellectual milieu,

identical associations, and recalled a common stream of shared knowledge. An attempt to trace this stream and to project its influence in music writing has been made. Nowhere is the nature of varieties of time so comprehensible as in music. Music could also demonstrate successive procedure within time and simultaneous occurrence. Further, the concept of *ultra mensuram*, "outside of time"—a difficult notion to say the least—could be exemplified in music, and indeed was.[41]

To read Robert Grosseteste's *De cessatione legalium* together with Anonymous IV's music treatise is to expose oneself to an intellectual atmosphere in which revolutionary breakthroughs were possible. The discovery that music notation could express time values, or rhythm, thus truly regulating the passage of time is an intellectual feat accomplished during just this period. Through this discovery music, both in notation and in composition, was changed for all time.

---

[41] Est et alius modus, qui dicitur habundans supra rectam mensuram rectae longitudinis et rectae brevitatis, et dicitur contra ultra mensuram, vel potest dici modus obliquus transumptive, et sic obliquus ad obliquum....Rectus contra ultra mensuram vel obliquum multis modis: (examples given)...De reliquis pone tenorem loco discantus, sicut omnes illi, qui sunt de ultra mensuram, et alios modos omnes pone loco tenoris (*Anonymus IV*, ed. pp. 76-77).

CHAPTER THREE

DUCTUS, TRACTUS, CONDUCTUS: THE INTELLECTUAL CONTEXT OF A MUSICAL GENRE

"I will sing of loving kindness and justice, To Thee, O Lord, I will sing praises," is the opening statement of Psalm 100 (101), which describes, one aspect after the other, the way of life of the "righteous person:"

> I will give heed to the blameless way.
> When wilt Thou come to me?
> I will walk within my house in the integrity of my heart.
> I will set no worthless thing before my eyes;
> I hate the work of those who fall away;
> It shall not fasten its grip on me.
> A perverse heart shall depart from me;
> I will know no evil.
> Whoever secretly slanders his neighbor, him I will destroy;
> No one who has a haughty look and an arrogant heart will I endure.
> My eyes shall be upon the faithful of the land, that they may dwell with me;
> He who walks in a blameless way is the one who will minister to me.
> He who practices deceit shall not dwell within my house;
> He who speaks falsehood shall not maintain his position before me.
> Every morning I will destroy all the wicked of the land,
> So as to cut off from the city of the Lord all those who do iniquity.

Each aspect of this psalm, eventually, will be seen to have importance. It is, according to tradition, a Psalm of David, the King; it draws attention to the city of the Lord, and it, most importantly, depicts a way of life—to cite the Latin expression, which, in fact, frequently occurs, a *via*—a course of action; a direction taken and maintained, leading to a goal. It depicts a reign, a continuity containing single events, or a regimen. Robert Grosseteste brings up these features in his Oxford lecture in theology:

> As Cyril says, this psalm describes the perfect *conduct* of life and teaches the perfection of holiness, which consists, not only in shunning evil and doing good, but also in fighting evil and destroying it both in ourselves and others, and in promoting good not only in ourselves but, to the extent of our power, in others also...This *perfection* of *conduct* has three parts: our *conduct* as individuals; our *conduct* in a family; and our *conduct* as

citizens among fellow-citizens. We can consider all three of these parts in expounding this psalm.[1]

In his commentary, we notice that Robert Grosseteste has transferred a theory of kingship contained within the psalm, and the description of the perfection of a king's reign, to the more personal level of the perfection of conduct as individuals, within the family circle, and within a social context. Grosseteste's entire commentary on this psalm would be important for the problem which we will, in this chapter, discuss; in particular, his comment on verse seven speaks to the issues to be raised. The verse reads, "He who speaks falsehood shall not maintain his position before me." Grosseteste comments: "This is well said. For us, who are placed in a position of authority (*nobis autem qui gradu regiminis constituti sunt*), even a frivolous word becomes pernicious. As Bernard [of Clairvaux] said; 'For the laity, a joke is a joke; but in the mouth of a priest, it is blasphemy."[2] The phrase, *in gradu regiminis* (translated more literally, "in the course of a regime") will play a leading part of our consideration.

The psalm, as well as its commentary, innocuous, apparently simplistic, and predictable as they both may seem, actually form the protruding tip of a thirteenth-century intellectual iceberg. Scriptural topic and subject area form a traditional background for dealing with new Aristotelian tools and for coming to terms with an explosion, so to speak, of knowledge which we understand as the Aristotelian reception within the early university environment. Both scriptural construct and the new understanding of the problem it contained were set forth in the thirteenth-century song genre not surprisingly known as the *conductus*: that is, conduct.

The psalm and its commentary give evidence for the pervasive influence of the psalms in general in intellectual life; and they also set up a relationship, which is consistent throughout the Middle Ages, by which a major theological, as well as scientific, precept is made accessible by means of a musical genre. It is an "interdisciplinary" collaboration of the most organic and productive kind. Aspects contained in this new concept, *ductus-conductus*, will be presented, followed by the specific songs which exemplified the essence of the concept, both *de facto*, by directed flow of melody, and by the explicit use of textual matter. The *conductus* sets an example of the significance behind a musical style genre, as well as evidence for the universality of themes brought up in the psalms.

Furthermore, the topic presented here deals with time-measurement and event, a theme as abstract as any of the intellectual preoccupations of the

---

[1] See Southern, *Grosseteste*, p. 119: Eton Ms 8, f. 198a; the English translation of the psalm included above is that of the *New American Standard* (First edition, Glendale, California, 1971).

[2] Southern, *Grosseteste*, p. 118: Eton Ms 8, f. 202d.

period. Time-lapse measurement and event suggest, most of all, the possibility of keeping track of the evanescent flow of time, of differentiating moments of lineally-conceived reality. This, of course, is exactly what narratives—stories, songs, and sagas—do; but *how* do they do it? The carefully worked out thirteenth-century answer is: by constructed, characteristic, individual properties of events, one after the other, in orderly sequence. The relationship of *flow* to *moment* appears to be a problem at once too basic, yet too abstract, to be taken seriously, but this is characteristic of *all* of the subjects which were discussed with the most attention, thoroughness, and even vehemence in the first two generations of the thirteenth century. Temporal flow —a linear, successive conception of reality—and its relationship to event, a simultaneous element, both of which could be conceived vertically together, form such an issue. As was the case with the other main subjects of the period, the topic was preceded by a long-standing tradition.

Within this discussion, there were two critical, contradictory ways of viewing time. One way, suggested by a large corpus of philosophical writings from antiquity, viewed time as without beginning or end, as eternal, and as infinitude. One influential description of time as eternity was the simultaneous aspect of the ever-present timelessness inhabited by God presented, for example, by Boethius in his *Consolation of Philosophy*.[3] It was against this long-standing philosophical backdrop, of which every medieval commentator would have been aware, that thirteenth-century discussions of time, duration, measured duration, and characteristic event take place.

Time, in its inexorable, directionally forward movement, motivated in its motion by some unseen source, could be captured, measured, and accounted for in increments, by individual signs, or visual events. The problem had an urgency, since, in describing and measuring *time*, one was, of course, describing and measuring *life*, since time is the substance of lives, both individually-personally, and politically-collectively, in terms of a reign, a *regnum*. Time was life, and this is the reason that descriptions and possibilities of measuring temporal motion occur, in one way or another, as key issues in all of the major Aristotelian treatises, especially the *Physics*, the *Metaphysics*, the *Poetics*, and the *Ethics*—just the treatises that received the most attention in the period under discussion, as well as throughout the thirteenth century. Time flow and time measurement underlie the musical song-genre, *conductus*.

---

[3] For an excellent discussion, as well as extensive bibliography, on the subject, see R. L. Dales, "Time and Eternity in the Thirteenth Century," *Journal of the History of Ideas*, 49 (1988), pp. 27-45; as well as Dales, *Medieval Discussions of the Eternity of the World* (Leiden, 1990).

Robert Grosseteste, in each one of his writings, but especially in his commentary on the Old Testament book of Genesis, his treatise on the Ten Commandments, *De decem mandatis*, and his partial commentaries on the *Posterior Analytics*, and *Physics* of Aristotle, sets forth a comprehensive, systematic presentation of the concept *ductus*, *conductus*. This concept includes the following areas: first, *ductus* describes the aspects of directed motion and generates a whole vocabulary of related concepts; secondly, it is related to time as containing phases of both motion and quietude; thirdly, *ductus-conductus* also provides a vehicle for descriptions of duration, as well as order within duration, that is, *ordo*. Fourthly, the concept includes the idea of distinctive properties which contain, by virtue of their nature, the possibility of consummation, or perfection, summarized in the pair of concepts, *proprietas-perfectio*; fifthly, *ductus-conductus* expresses relationship itself by using terms such as *copula*. Finally, the entire complex of ideas leads, eventually, to the construction of a comprehensive term, *via*, that is, way, course of life, reign, regimen, context, conduct, or syntax. One, obviously, in attempting to understand both the importance and the outcome of this entire discussion, is also admitted into the intellectual laboratory of the early thirteenth century, an environment which is far less self-assured and systematic than scholasticism will eventually become. Let us carefully view each one of these facets.

First, the richness of the concept, *ductus-conductus*, is shown by the number of synonymous terms used, each adding a dimension to the discussion. There are expressions of motion, propulsion, pushing and pulling, training, discipline in a directed, reflective fashion, persistence in a chosen direction, as well as ambulatory progress, in the use of terms such as *ducit*, *trahit*, *dirigunt*, and *ambulavit*. Robert Grosseteste repeatedly uses the verb *ducit*, for example, in the context of direction toward a goal: que nos per hanc peregrinacionem sine errore *ducit ad patriam* (who [the Father, God] leads us through this pilgrimage, without errors, to the fatherland).[4] The use of *ducit* in this short passage exposes the directional force and consistent motivational power which is attributed to God, who is simultaneously King, righteous Judge, and Priest.[5] Further on in his argument, this concept of ongoing, focused directionality is made more specific when contrasted

---

[4] Grosseteste, *De decem mandatis*, ed. Richard C. Dales and Edward B. King (*Auctores Britannici medii aevi* X (Oxford, 1987), p. 3.

[5] Grosseteste, *De decem mandatis*, p. 8: Ipse namque non solum est summus rex, sed et summus sacerdos et summus iudex, cuius civitas et templum fidelis est anima, in qua velut regni solium et tronus et sacerdotalis cathedra et iudicis tribunal est fidelis amoris summitas. In summo enim, sive in intimo amoris fidelis anime, Dei regis, sacerdotis et iudicis propria sedes est.

with the lack of focus, diffusion, and deflection, of false gods.[6] Directionality contrasts with its opposite, thus explaining what is meant by the concept. The concept of steady, directed progress toward a goal, motivated by an unseen force, is enhanced, in Grosseteste's commentary on the book of Genesis, by the attribute of measurement. As Grosseteste writes: "Measurement leads (*ducit*) to the apprehension of all potential content," that is, measuring things makes them specific—leads to precision—so that one can understand what they are about, and, furthermore, one knows where one has and where one has not been.[7] The attribute of raising, training, and discipline is also a part of the concept of *ductus*, as in the training or raising of children. A father who does not train and discipline his son (*trahit*), has less affection for him than he does for his mule, writes Grosseteste, because if the animal is in danger, he will shout at it, prod, punish, and whip it until the mule is safe.[8] Finally, the concept implies regulation, organization, or rule. *Regitive*, *regnatur* are used in connection with *ductus*, as in the sense of the virtues ruling the mind, and of the ruling forces of the natural world.[9]

Ductus, as a concept, is used in thirteenth-century discussions of orderly thinking and differentiating processes, in which magnitude, species, and order are distinguished. In this context, the terms *re composita* (or a thing, and entity, which is a composition), *figura*, and *ordo* frequently occur. To again quote Grosseteste: Another example can be given for magnitude, species, and *ordo*. *Magnitude* leads to apprehension of God's power; *species* to the Son of God, who is the splendor of the Father; and the *figura* of his substance and *ordo* leads to the generosity (*benignitatem*) of the Holy Spirit, who ordains beauty and utility." Much of our key vocabulary is contained in this passage: "Exemplum alterum est in unaquaque re ipsius rei magnitudo, species et *ordo*. Magnitudo enim *ducit* apprehensionem in Patris potentiam; species in Filium qui est splendor Patris et *figura* substancie eius; *ordo ducit*

---

[6] Grosseteste, *De decem mandatis*, p. 11: Et dicit pluraliter *deos alienos*, quia ad totum humanum genus dirigitur hoc preceptum, in quo diversi diversa variis erroribus delusi pro Deo coluerunt, et etiam idem aliqui plures deos habuerunt.

[7] Grosseteste, *Hexaemeron*, p. 223: Tercium exemplum est in unaquaque re numerus, pondus et mensura. Mensura enim ducit apprehensionem in contentivam omnium potentiam...

[8] Grosseteste, *De decem mandatis*, p. 50: Magna est patris inclemencia vera, cum falsa clemencia filium delinquentem non corripit, minoremque pietatis affectum videtur habere erga filium quam erga iumentum suum; quia si viderit iumentum suum in puteum lapsum, statim accurrit, coadiutores advocat, clamoribus instat, stimulis pungit, flagellis percuttit, finibus iniectis trahit, nec ab incepto cessat donec iumentum suum a puteo extraxerit. Filium autem suum videt lapsum in puteum perniciosissimum profunditatis viciorum, et extrahere nullis adminiculis nititur, sed magis plerumque applaudit, et favore consensus et levitate asperima, inclementissimaque clemencia et misericordia immisericordissima eiusdem mittit et corpus et animam in puteum gehenne.

[9] Grosseteste, *Hexaemeron*, p. 68:...item virtutes naturales regitive sunt in anima sicut celum, et virtutes que reguntur sicut terra. The same virtues which rule the mind rule the sky, and these are, as well, the reigning virtues, or forces which rule the earth.

in Spiritus Sancti benignitatem, que unamquamque rem in cuiuslibet alterius ordinat pulcritudinem et utilitatem."[10]

Ductus brings together a complex of significances. Direction, motivation, movement towards a goal, training, discipline, and rule cluster around the use of *ductus*, *ducit*, *perducitur*, *trahit*, *dirigunt*. There is also the connotation of inevitability, of "things taking their course" in the concept of *ductus*.[11] In this sense, *ductus* parallels, imitates, and describes life, which has duration and exists in time. A reign then, by analogy, is a construct that enables one to visualize a "life" as a continuum, a continuity, that leads to a consummation, an end, that is, *ductus in consummacionem*, which is a phrase Grosseteste uses frequently.[12] This continuum, leading to an end, is measured by increments indicated by signs or figures, that is, as he states, figures of locution: *in locucionibus figuratis*, *figurata locucio*.[13] All of these aspects are contained within the concept of *via*, expressed (in Grosseteste's language) as the "life of the wayfaring man,"[14] the reign of a king, or ideally, the life of Christ. Robert Grosseteste, in many contexts, and in all of his works, delineates, describes, distinguishes, and patiently explains, tenet by tenet, what apparently, to him, was a seminal concept, that of *figurae in locutione*, or particular, characteristic figures within a context which was constructed, continuous, and directed, leading, eventually, to a

---

[10] Grosseteste, *Hexaemeron*, pp. 222f (italics are added).

[11] Grosseteste, *Hexaemeron*, p. 250: Igitur, sicut monet Basilius: "nunc secundum imitacionem vite in paradiso nos ipsos agere volentes, fugiamus istam multiplicem cibariorum assumpcionem; et ad illam vitam secundum quod est possibile nosmet ipsos ducentes, fructibus et seminibus et arborum summitatibus utamur in victum; et quod amplius est istis, sicut sanis non necessarium abiciamus; neque enim abhominata sunt propter creantem, neque electa propter carnis placentem passionem."

[12] Grosseteste, *Hexaemeron*, p. 240, is one of many passages containing the idea of perseverance to an end: Licet enim angelus maior sit homine per incorruptibilitatem et per actum fruendi Deo et per confirmacionem a principio perseverandi in precepto felicitatis bono, unde tamen ministrat homini vicem optinet velud minoris et subiecti. Continuous thrust towards a goal is another aspect of this basic concept: Unde, cum omnia ad finem oporteat dirigere, ars exposicionis huius scripture est ut totum quod in ea invenitur significet ultimo aliquid de statu glorie, aut aliquid directe deducens in statum glorie, velud est fides, spes et karitas (*Hexaemeron*, pp. 54f.).

[13] Grosseteste, *Hexaemeron*, p. 55, quoting from Augustine, *De doctrina christiana*: "Servabitur in locucionibus figuratis regula huiusmodi, ut tamdiu versetur diligenti consideracione quod legitur, donec ad regnum caritatis interpretacio perducatur. Si autem hoc iam proprie sonat, nulla putetur figurata locutio."

[14] Grosseteste, *De decem mandatis*, p. 4: The ten commandments briefly and cogently present a way through a thicket of branches within a forest, that is, the opacity of the sciptures:...que continet tota scriptura sacra, que homini viatori vix, aut nullomodo, pre multitudine sunt innumerabilia, sicut in arbore ramosa, stipes et rami principales brevi comprehenduntur numero, cum extremorum ramusculorum de hiis exortorum vix sit numerabilis multitudo. (The scriptures as a dense, opaque thicket (*silva*: *hyle*) is a topos that deserves more consideration than can be given here, see chapter eight on the concept of composition below.)

recognizable *terminus*, or end. He was not alone. The concept of event in context had widespread discussion and application, especially in song.

For historians of music, the thirteenth-century song genre, *conductus*, has been a source of perplexity because it appeared and vanished within a brief period—approximately the first two generations of the thirteenth century, exactly the period of Grosseteste's prime—and because it, unlike the sequence, had no obvious raison d'être, no specific liturgical place or consistent function within the mass, or any other ceremony.[15] The *conductus* was the musical exemplification and elucidation of an important intellectual discussion in thirteenth-century natural science and theology. We have looked at the background of this concept and at its extension and elaboration in Robert Grosseteste's thought and writing. The musical-textual genre provided, in both text and music, a comprehensive example of an intellectual-theological problem; one could even say that the musical genre, *conductus*, was a resolution of this problem.

The concept of *ductus*, with the related vocabulary *perducit*, *trahit*, *dirigit*—all indicating forward motion, directionality, and locomotion—appears to have been one of the most important considerations of intellectual discourse. The topic gains in interest, intensity, as well as delineation into separate aspects of study during the course of the early thirteenth century. One source of this interest in properties of longitudinal, directional motion was the *Physics* of Aristotle, the central, and most commented upon, source of motion discussion; but there was much earlier preparation for this concept. Augustine, for example, in his *City of God*, sets forth a concept of motion in which inclination results in motivation, leading, eventually, through perseverance, to perfection. On the basis of inclination and motivation leading to a place—the City of God—the point of his massive multi-volume work was differentiated. Interest in specifically

---

[15] Cf. Fritz Reckow, *Conductus*, in: *Handwoerterbuch der musikalischen Terminologie* (ed. Hans Heinrich Eggebrecht [Wiesbaden,1977ff.]); with an opening statement: "Das Wort conductus ist um oder gegen 1100 wahrscheinlich als Funktionsbezeichnung fuer den Geleit- oder Umzugsgesang in das mus. Fachvokabular eingefuehrt worden," a statement which stands without sufficient evidence behind it, either in liturgical books containing music or in sacramentaria. Reckow has taken exceptional rubric situations to arrive at a general conclusion. It should be observed that the major collections of *conducti*, such as those in the manuscript Florence, Biblioteca Mediceo-Laurenziana, Pluteo 29,1 date from the period under discussion; further, no function is indicated. One source for Philip the Chancellor's authorship of certain *conducti* is the *Chronicon Alberici* (ed Leibnitt, Hannover, 1698), p. 543; cf. Rudolf Peiper, "Zur Geschichte der mittellateinischen Dichtung," *Archiv fuer Literaturgeschichte* 7 (1878), p. 413. cf. Ernest K. Sanders, "Conductus and Modal Rhythm," *Journal of the American Musicological Society* 38 (1985), p. 445: "In spite of his garrulity, Anonymous IV provides very little information specifically on the conductus in his treatise (ca. 1275)." Sanders, without explanation, has taken the death-date of Henry III for that of the anonymous treatise, an example of how assumptions are perpetuated. For an extensive discussion of this problem, see below "The Intellectual Relationship of Robert Grosseteste and Anonymous IV."

Aristotelian motion concepts, then, was reinforced by a long tradition of viewing time as a forward-moving process, a longitudinal, continuous course containing events which were contingent, one upon the other. This was neither self-evident, nor was it to be simply assumed.

How was the concept of *ductus* understood; and why was it considered to be important? We have drawn out the conceptual resources of the *conductus*, but what of the texts and music? Do they demonstrate or exemplify a concept of *ductus* containing expressions for "leading out," using synonymous terms such as *tractus*, *trahit*, and *perducit*? Does a group of songs exist, forming a genre, based on the idea of perseverance to a goal, or an inclination, motivated by its own inner nature, toward an end? The concept formed a basis for discussions of locomotive motion; but the concept is also essential to *thought* locomotion, or the continuity of directed, logically contiguous thoughts. Like all of the important Aristotelian concepts that exploded across the intellectual horizon of the thirteenth century, *ductus* was prepared by a long history of thought, was channelled into several disciplinary streams, and was differentiated, not only by Aristotle himself, but by the commentaries that his treatises generated. Since the concept of *ductus* was so basic, therefore difficult to understand without exemplification, a commentary literature developed—a literature which sometimes threatened, by its volume, to obscure the texts it elucidated. In some cases, examples of issues too obvious, and conceptual pursuits too self-evident to require explanation, appeared without the intellectual background which supported them. This is the case with the song-genre, *conductus*. Let us have a look at these songs. *Conductus*, as a genre, is about *conduct*.

Two compositions attributed to Philip the Chancellor have been selected in order to demonstrate the fact that conductus texts elucidate the concept of *ductus*.[16] Both texts are typical of the genre. Both their subject matter and

---

[16] Philip the Chancellor, d. 1236; cf. *Analecta Hymnica,* vols. 1-24, ed. Guido Maria Dreves (Leipzig, 1886-1922). Volume 21 contains conductus texts attributed to this author. See also Palémon Glorieux, Philippe le Chancelier in: *La Faculté des arts et ses maîtres au xiiie siècle* (Paris, 1971), pp. 269-275; and Z. Kuksewicz, "The potential and the agent intellect" in *Cambridge History of Later Medieval Philosophy,* pp. 597f: "The prohibition of 1210 against teaching Aristotle's texts dealing with natural philosophy stopped the process of assimilation of the Aristotelian theory of the intellect in the Paris Arts Faculty for thirty years. However the process continued slowly in the Paris Faculty of theology, where no Aristotle texts of any kind had been taught and consequently no prohibition was enforced. William of Auvergne, Philip the Chancellor, and John of La Rochelle were the main links in this process." See below as well, "The Intellectual Relationship of Robert Grosseteste and Anonymous IV," for a discussion of Grosseteste's theological training in Paris, which would have taken place during this period, and, for aspects of the intellectual relationship between Grosseteste and William of Auvergne, see Steven P. Marrone, *William of Auvergne and Robert Grosseteste. New Ideas of Truth in the Early Thirteenth Century* (Princeton, 1983). Philip the Chancellor was one of the most able and original thinkers of the scholastic period. Yet, until recently, his major work, *Summa de bono,* was relatively unknown. Cf. *Summa de bona Philippi*

the music itself illustrate continuity, flow, direction of life and reign, and lead to a conclusion, a consummation. The conductus, *Fontis in rivulum* is a massive composition; its principal subject is *ductus*:

Fontis in rivulum
Sapor ut defluit
Odor ut vasculum
Infusus imbuit
Sic vita populum
Regentis instruit,
Sic testa figulum
Probat vel arguit.

Doctor abutitur
Doctrine regula,
Cuius inficitur
Subiectus macula,
Defectu mergitur
Naute navicula,
Dum caput patitur
Et membra singula.

Omnis ambitio
Radix malitie,
Manat ex vitio
Romane curie,
Quo privilegio
Nitunter hodie
Matris contagio
Corrupte filie...

Ha! cum iudex venerit
Et cum ventilaverit
Triticum in area,
Fructum qui non fecerit,
De cultoris vinea
Palmes excidetur.
Cicatrices vulnerum

Christi, clamor pauperum,
Sordes quas non tersimus
Accusabunt operum,
Primus et novissimus
Quadrans requiretur.

Cancellarii Parisiensis, ed. Nicholas Wicki (*Corpus philosophorum medii aevi. Opera philosophica mediae aetatis selecta*, 2 vols [Bern, Switzerland, 1985]; Richard C. Dales, *Medieval Discussions of the Eternity of the World*, especially pp. 57-70).

Just as flavour flows down
In the fount's stream,
And just as scent imbues the vessel
As it is poured in,
So the life of a ruler
Teaches his people,
And so his wares
Approve or censure the potter.

The learned abuses
The rules of his learning,
Whose discipline
Is stained by a blot,
For by a defect is sunk
The sailor's craft;
When the head suffers,
So do the separate members.

Ambition is the root
Of all evil;
It flows from the sin
Of the Roman Curia,
Where by privilege
Daughters corrupted,
By their mother's contagion
Strive today.

Ha! behold, when the judge comes,
And when he winnows
The grain on the threshing floor,
The vine which makes not fruit
Will be cut down
From the keeper's vineyard.
The scars of Christ's wounds,
The cries of the poor,
The filth of the works which we have not cleansed
All accuse;
The first and the last
Farthing will be required.[17]

One notices the richness and sophistication of the poet's use of the Latin language, as well as his bringing together of Latin literature and the New Testament. There are quotations from Juvenal, as well as from the Gospels of Matthew, Luke, and John.[18] *Ductus* vocabulary abounds; the incipit of

---

[17] The subject of free will and responsibility, presented here, requires further treatment in another forum. For a short discussion of Philip's position on this matter, see J. B. Korolec, "Free will and free choice," *Cambridge History of Later Medieval Philosophy*, p. 634.

[18] Edition and translation in Gordon A. Anderson, *Notre-Dame and Related Conductus: Opera Omnia. The One-Part Conductus Transmitted in Fascicule X of the Florence Manuscript* (Henryville, PA, 1981), p. xiii-xiv.

the conductus itself, *Fontis in rivulum*, as well as the concept of *ambitio*, or way of life, emphasize the point of the song, and of the entire *ductus* discussion, that is, *flow* or *course*. It is *via* leading to a conclusion, a terminus, or the consummation of the course, in which a righteous judge pronounces a verdict, a conclusion. Exactly the same subject matter is presented in another of the songs attributed to Philip the Chancellor, *Associa tecum in patria*, in which connection and continuity form the principal subject matter, attributes of the *ductus* concept are set forth:

Associa
Tecum in patria.
Et satia
Perhenni gloria.
Vite brevis
Peritura
Preterit *figura*,
Umbra levis
Ut pictura
Interit litura.
Fides plana
Quod mundana
cuncta vana.
Late patet area
Palea,
Nulla grana;
Sors humana
Tamquam lana
Teritur a tinea;
Lese mentis vulnera
Sana, ut a cura
Sit secura,
Iugo libera;
Procura,
Luceant sic opera,
Nube remota,
Tersa culpe nota,
Solvat ut vota
Tibi mens devota.
Renes lustra,
Cor illustra,
Unda
Gratie fecunda,
Lava carnis crimina;
Animam illumina,
Holocaustum anima,
Caro victima
Munda,
Mens lucida,
Caro sit candida.
Sancte Deo precare,

Deum precare,
Ut hodie
Ros et lux gratie
Mundans instillet
Lucens scintillet.
Eligi,
Da cum agnis eligi,
Da cum granis colligi,
Da cum iustis diligi,
Via vite dirigi,
Alis virtutum erigi,
Eligi.

Join us
With thee in the Fatherland,
And fill us with everlasting glory.
This short life's body,
Doomed to perish,
Soon passes away,
And this light shadow,
Like a picture
Blotted out, passes away.
Superficial faith,
Being worldly,
Is wholly vain.
Widely spread over the threshing-floor
Is the chaff,
And no grain;
The human lot
Just like wool,
Is torn by the worm;
Heal the wounds of the wounded
Mind, so that by thy care
It will be secure,
And be free from the yoke;
Tend our needs,
That our works might shine,
With the cloud removed,
And our character wiped clean of sin.
So that our mind devoted to thee
Will send forth prayers.
Purify our reins,
Illuminate our heart,
And by the water
of fecund grace
Wash the sins of our flesh;
Enlighten our spirits,
Quicken our burnt-offering,
In its flesh let the victim
Be clean,
Let the mind shine bright,
And let your flesh be pure.

O holy one, most dear to God,
Pray God
That today
The dew and light of grace
Cleansing, will rain down,
Shining and gleaming.
O chosen one,
Grant that we will be chosen with the lambs,
Grant that we will be gathered together with the grain,
Grant that we will be esteemed together with the just,
By the way of life directed,
Upheld by the wings of virtues.
O thou chosen one![19]

Although this fact, because it is so basic, may easily be overlooked, a concept of linear movement, measured by events—abstract as this may appear to be—is made simple, comprehensible, and clear by the visual and sonorous phenomenon of notational figures within the connected line of notated music. (Example: the notation itself as *figures* within *continuity* makes a statement, that is, forms an *exemplum*, even without additional explication).[20] A linear concept of time is delineated by a multitude of divisions represented by notational signs in a connected, additive succession of individual musical and visual events. The two components common to narrative process, that is, delineated particular moment within context, shared by all of the liberal arts, are elucidated within the discipline of music in the song genre, *conductus*. Music, the art of exemplification, made an abstraction comprehensible and related it to life. In this respect, this thirteenth-century song joins the rest of the world's musical cultures in profound respects, in that *conductus* parallels and exemplifies life itself, gives instruction and values in life, functions as a construct for life.

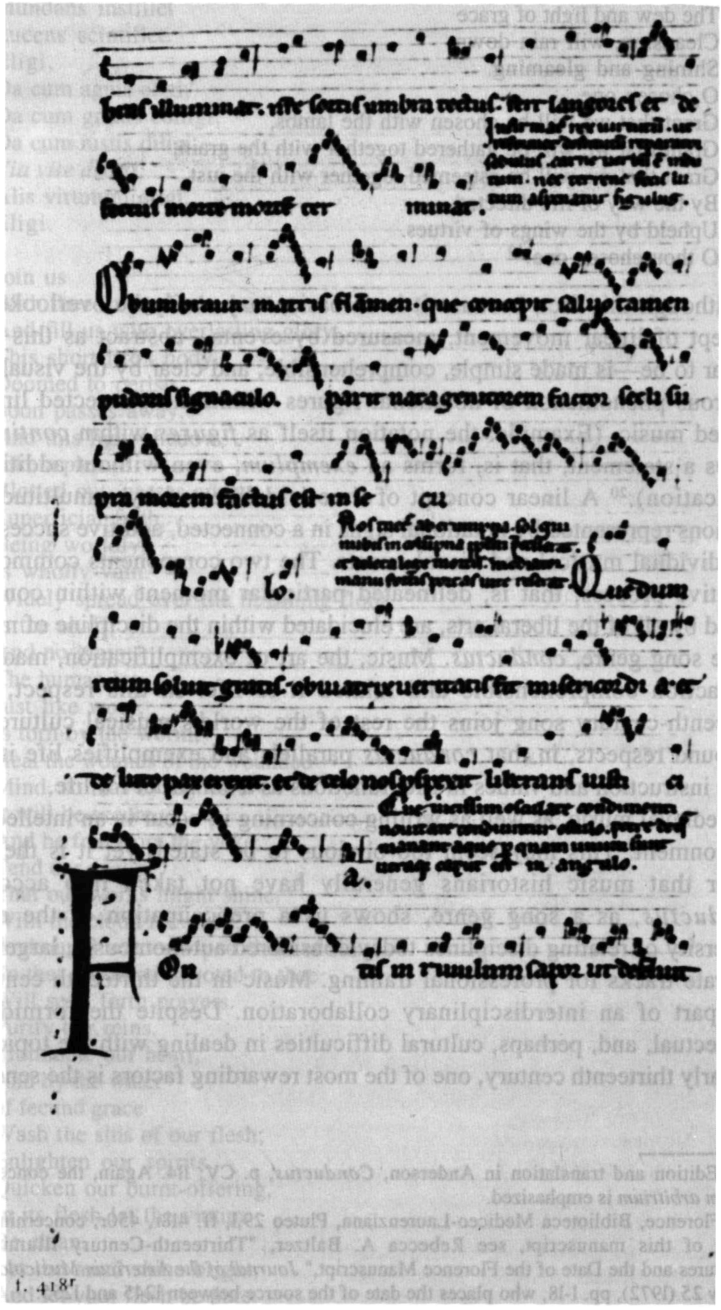
Medieval music, as well as writing concerning it, occur in an intellectual environment. This may seem too obvious to be stated, yet it is the one factor that music historians generally have not taken into account. *Conductus*, as a song genre, shows us a preoccupation of the early university of relating disciplines today considered autonomously, largely as separate tracks for professional training. Music in the thirteenth century, was part of an interdisciplinary collaboration. Despite the formidable intellectual, and, perhaps, cultural difficulties in dealing with the topics of the early thirteenth century, one of the most rewarding factors is the sense of

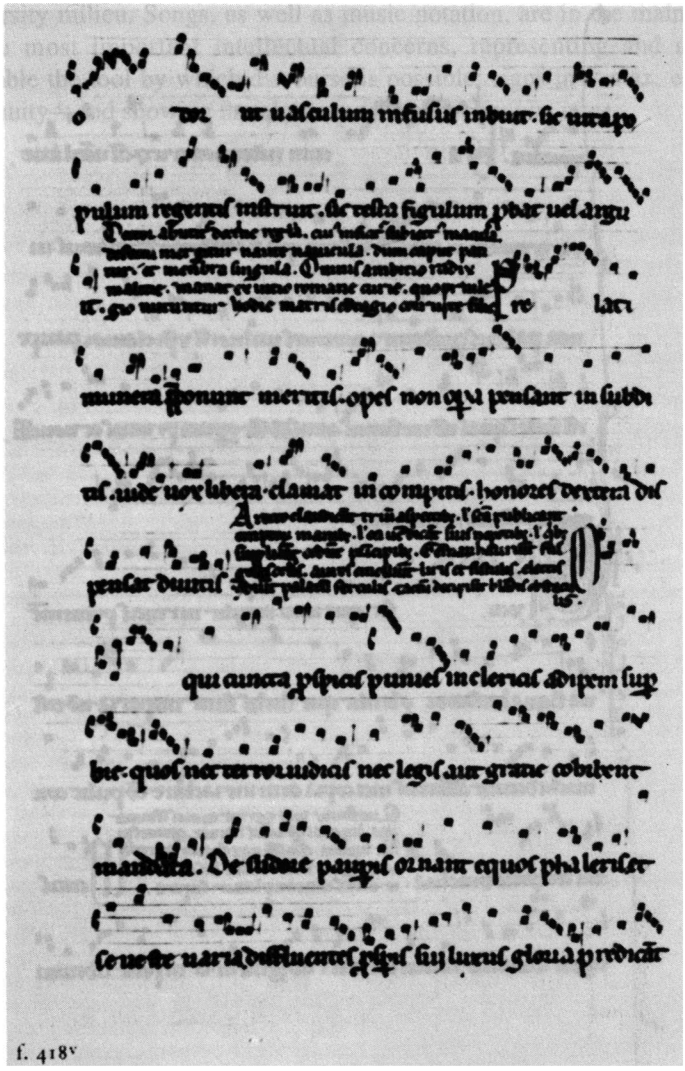
---

[19] Edition and translation in Anderson, *Conductus*, p. CV; 114. Again, the concept of *liberum arbitrium* is emphasized.

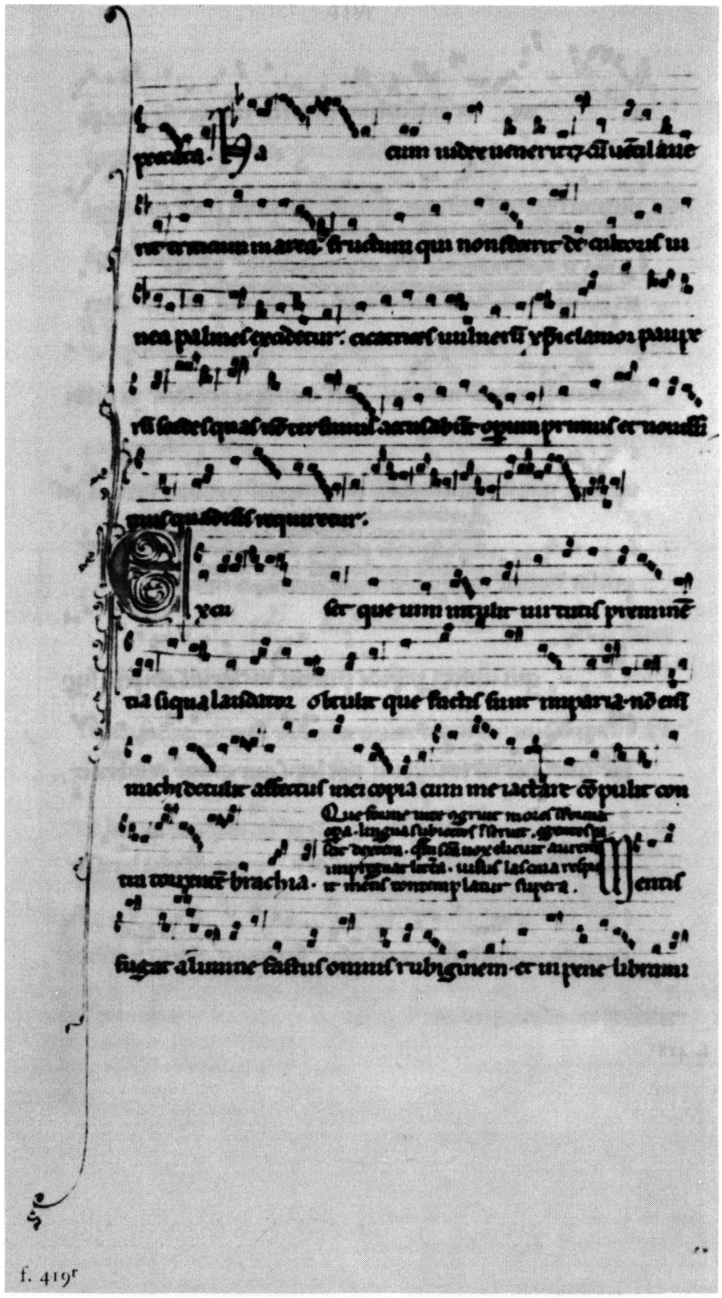
[20] Florence, Biblioteca Mediceo-Laurenziana, Pluteo 29,1, ff. 418r, 450r; concerning the dating of this manuscript, see Rebecca A. Baltzer, "Thirteenth-Century Illuminated Miniatures and the Date of the Florence Manuscript," *Journal of the American Musicological Society* 25 (1972), pp. 1-18, who places the date of the source between 1245 and 1255.

Example: Florence, Biblioteca Mediceo-Laurenziana Pluteo 29,1, ff 418r-419r





f. 418v



f. 419r

community, as well as the atmosphere of excitement pervading the early university milieu. Songs, as well as music notation, are in the mainstream of the most important intellectual concerns, representing and making available the tool by which discourse is possible: signs in syntax, event in continuity—and showing its relevance to life, *curriculum vitae*.

CHAPTER FOUR

CHANGE IN A CONCEPT OF "MODE"

The importance of a concept of *modus* can be clearly seen by the frequency with which the term is used in writings on nearly every subject during the thirteenth century. One finds it in incipits of works, particularly written by members of the Parisian *artes* community,[1] as an important technical term, used by a group of grammarians who, in fact, employed the term *modus* so frequently, and in ways so fundamental to their lines of investigation, that they were known by the appellation, *modistae*,[2] and in

---

[1] The use of the term *modus* in medieval logic within the period under discussion, although indicative of the importance of the term, is not central to the point to be made in this chapter, and therefore has been purposefully excluded. Here, the term is used generally, more fundamentally, as *part* within *whole*. In this context, it is of interest to notice the number of times *modus* occurs in Palémon Glorieux's list of incipits of works by Parisian *artes* masters in the thirteenth century; cf. Glorieux, *La Faculté des arts et ses maîtres au xiiie siècle*, p. 506ff. In addition, Adam Marsh's chapter titles to Robert Grosseteste's *Hexaemeron* commentary, serving as interpretatory synopses, frequently present the concept of *mode*, or, more explicitly, *six modes*. The term is often used with connotations of "show", indicating its demonstrative, cognitive, analytical qualities: I:3: Sermo in assignandis sex modis exponendi...I:19: Sermo in ostendenda intelligencia allegorica et morali terre, aque, abissi, inanitatis, vacuitatis et tenebrositatis; 8 scilicet modi, et est nonus modus qui est secundum Augustinum exposicionem literalem et spiritalem consequens. II:9: Sermo in ostendendo qui sint intellectus spirituales videlicet anagogice, allegorice et moraliter in condicione lucis primo facte et in aliis que secuntur usque ad opus diei secunde, et sunt IX modis quos ponit. II:10: Sermo in ponendis naturalibus lucis proprietatibus quibus intelligi valeant eciam proprietate rerum mistice signatarum, et sunt 20 modi quos ponit. III:3: Sermo in declarando quomodo secundum Augustinum et alios expositores nomen firmamenti intelligitur celum in quo locata sunt sidera super quod veraciter sunt aque posite, et ostendendo modos possibiles diversos quibus in existere aquas ponere poterit. III:14: Sermo in ostendendo significaciones allegoricas firmamenti et aquarum superiorum et inferiorum, et sunt modi 16. IV:1: Sermo in ostendendo cur mutato loquendi modo dixit *congregentur aque* et *appareat arida*, et non dixit observato superiore modo loquendi... IV:18: Sermo in ostendendo modum et ordinem germinacionis temporaliter decurrentis usque in finem; exemplum huius prime precepcionis. IV:28: De spinis et tribulis et herbis venenosis, quando et cur orta sint, et sunt modi tres (Grosseteste, *Hexaermeron*, pp. 341ff). Since the context of the Latin *modus* is the subject of this chapter, a larger number of Latin quotations than is customarily the case have been included within the body of the text.

[2] The "Modistae" include: Albertus, *Quaestions de modi significandi*, ed. L. Kelly (*Amsterdam Studies in the Theory and History of Linguistics*, Series III: Studies in the History of Linguistics 15 [Amsterdam, 1977]); Boethius of Dacia, *Quaestiones super Priscianum maiorem*, ed. J. Pinborg and H. Roos (*Corpus philosophorum danicorum medii aevi 4* [Copenhagen, 1969]), *Quaestiones super librum Topicorum*, ed. N. J. Green-Pederson in: *Boethii Daci Opera* (*CPDMAe* 6,1 [Copenhagen, 1976]); Johannes of Dacia, *Summa grammatica*, ed. A. Otto (*CPDMAe* 1 [1955]); Martin of Dacia, *Modi significandi*, ed. H. Roos (*CPDMAe* 2 [1961]); Michael of Marbasio, *Summa modorum significandi*, ed. J. Pinborg in: "Some Problems of Semantic Representations in Medieval Logic" (in H. Parrett, ed., *History of Linguistic Thought and Contemporary Linguistics* [Berlin, 1976]); Radulphus Brito,

writings of all kinds. One notices that the term was particularly used during the thirteenth century, and in the intellectual milieu of the early university.

Robert Grosseteste, as well, uses the term frequently, and in specific ways. Let us observe how content for this term accumulates as we enumerate the levels of meaning which accrue as he proceeds to employ the term. He does so frequently. These many aspects of significance form an important background for the term as it is used, as well, in the music theoretical writing of the anonymous English author under consideration, and are essential for an understanding of the term as it is used by this writer on music. Without taking in the general significance for the term *modus*, as well as important ways in which its meaning had changed during the course of the thirteenth century, interpreters of this anonymous treatise have misunderstood the term and applied it in inappropriate ways to the music of the period under consideration.[3] This is another indication of the importance of connecting intellectual background with musical exemplification in an attempt to grasp both. The multivalence and functionality of the term can be more easily comprehended when its musical exemplification is applied, and, conversely, musical analogies are without rational explication unless their contemporaneous intellectual background is taken into account. This chapter will place both side by side.

Robert Grosseteste uses the term *modus* so frequently that one wonders what recourse he would have taken, had the term not been at his disposal. The term had, apparently for him, an irreplaceable significance. *Modus*, as well, appears to have had format and precise delineatory power that has all been lost through the centuries. Mode, today, has very little pungency. For this thirteenth century intellectual, however, the significance of the term is

---

Quaestiones super Priscianum minorem, ed. Heinz W. Enders and J. Pinborg (*Grammatica speculativa* 3 [Stuttgart, 1980]); Siger of Courtrai, *Summa modorum significandi*, new ed. on the basis of G. Wallerand's *editio prima*, J. Pinborg (*Amsterdam Studies in the Theory and History of Linguistics*, Series III: Studies in the History of Linguistics 14 [Amsterdam, 1977]); Thomas of Erfurt, *Grammatica speculativa*, ed. and trans. G. L. Bursill-Hall (*The Classics of Linguistics* 1 [London, 1972]). See also J. Pinborg, *Logik und Semantik im Mittelalter: Ein Ueberblick* (Stuttgart, 1972), p. 15ff; J. Pinborg, "Speculative Grammar," in: *The Cambridge History of Later Medieval Philosophy*, pp. 254-270, and van Deusen, "Rhythmic Structure and Speculative Grammar: The Musical 'Modistae'" in: *The Harp and the Soul* (New York, 1989), pp. 256-305.

[3] A recent article by Ernest H. Sanders, "Conductus and Modal Rhythm", *Journal of the American Musicological Society* 38 (1985), pp. 439ff., summarizes the levels of dissension. The questions which have been raised are: by whom was the system of "modal rhythm" "invented," to what music can it be applied, is more than one "mode" possible within a single musical composition, are some modes more constructive than others, and are the rhythmic modes metrical modes. Janet Knapp, for example, in "Musical Declamation and Poetic Rhythm in an Early Layer of Notre Dame Conductus," *Journal of the American Musicological Society* 32 (1979), pp. 383ff., remarks that a twenty-year consideration of the subject had not conclusively resolved the question of whether a piece was "in" one mode or another. The two courts of final appeal seem, in all cases, to be the writer's own sense of musical rhythm, taken in consideration with the text.

multivalent, his use of it is frequent, and the apparent thrust of the term is that it is a *part* within the *whole*. He writes, for example, of *modi proponendi* as *unam partem contradictionis in anima proponentes*, in the context of Aristotle's inquiry concerning geometry, music, and "all the rest of the sciences," and of modes which distinguish as well as divide, but he uses the term in countless other contexts as well.[4]

Mode, obviously, was a loaded term, as we shall see. In addition, the pair of concepts, *modus et figura*, in addition to the significance each term had individually, evoked conceptual substance as a duality. Accordingly, the two were often expressed together.[5] The pair was associated as well in writing concerning music.

Let us, one aspect at a time, construct Grosseteste's concept of mode. It is interesting to notice, first of all, that he often mentions music in his use of this term, offering musical instruments and situations as examples, as, for example, "Que vero ibi vocibus, et modis, et organis et lyris, transfiguntur Apollines et Musas et Minervas et Mercurios patronos habent."[6]

Secondly, one quickly becomes aware of the fact that mode, for Grosseteste, is a term which appears to lend itself to processionality, especially of a musical nature. It is used by Grosseteste in consideration of pronunciation within a series.[7] *Modus* furthermore describes successive procedure, that is, a procedural dimension which is usually contrasted to simultaneous event.

Thirdly, Grosseteste frequently uses *modus* as a term within the context of a discussion of aggregates, that is, a meaningful society or collection of particulars, as, for example, in this passage from the *Hexaemeron* commentary, in which Christ is presented as a unity, the word incarnate: "...*ut et ipsi in nobis unum sint*, videntur aggregari aliquo modo iste unitates sive uniones, videlicet qua Verbum incarnatum est unus Christus, unus videlicet in persona Deus et homo..."[8]

Expressions such as *collocatus* or *congruit* occur. In speaking of an *aggregate*, composed of individual modes, Grosseteste draws upon an interesting example, taken from Pseudo-Rhabanus (Paschasius Radbertus), *De corpore et sanguine Domini*, in which the aggregate of the tree of life is evoked as a manner of portraying the church, the *ecclesia*: "Constat igitur

---

[4] Grosseteste, *Hexaemeron*, p. 176: Potest tamen hec particula tot modis distingui et intelligi...

[5] *Figura/modus* frequently occur as a pair within logical inquiry. *Signum/modus* occur together in Adam Marsh's chapter title: V:7 Sermo ostendens quomodo luminaria sunt in signa, et sunt quinque modi (Grosseteste, *Hexaemeron*, p. 346).

[6] Grosseteste, *De decem mandatis*, p. 10

[7] Grosseteste, *De decem mandatis*, p. 12:...et insinuat modus pronunciacionis quam sermonis series.

[8] Grosseteste, *Hexaemeron*, p. 49

modis omnibus, quia sicut in paradiso lignum vite fuit, ex quo iugis subsisteret status hominis, si mandata servasset, inmortalitas, ita provisum est in ecclesia hoc misterium salutis, non quod eidem ligno hoc esset in natura, sed re visibili virtus invisibilis intrinsecus operabatur."[9]

An aggregate, in some respects, is a mystery. It is a construct, consisting of many parts, each of which has format, significance, distinct characteristics, and functionality. Together these modes of expression, impulse, and, perhaps, movement form a unity perceptible to the senses, and, especially, to the mind. Augustine, quoted by Grosseteste, refers to these particulars within a perceptible mental construct as *modules*: "...magna et mirabilis vis est anime, que illam compagem ineffabili permixtione vitaliter continet, et in quandam sui moduli redigit unitatem, cum eam non indifferenter, sed, ut ita dicam, indignanter patitur corrumpi atque dissolvi."[10]

These *modules*, which together comprise the entire unity of an *aggregate*, become, in the thirteenth century, *modes*. It is a transformation of the term from a designation of *totality* to significant *part*.

Passages containing the term *modus* within the context of a discussion of aggregates, societies, or collections abound in Robert Grosseteste's writings. One subject, to which he returns again and again, is one which we have already mentioned, the important theological theme of Christ's incarnation, accomplishing the reconciliation and unification of several modes within the unity of the incarnate word:

> ...in ewangelio Iohannis ait: *Non pro hiis autem rogo tantum, sed pro eis qui credituri sunt, per verbum eorum in me, ut omnes unum sint, sicut et tu Pater in me et ego in te, ut et ipsi in nobis unum sint, ut mundus credat quia tu me misisti*. In hoc namque uno de quo dicit: *ut et ipsi in nobis unum sint*, videntur aggregari alioquo modo iste unitates sive uniones, videlicet qua Verbum incarnatum est unus Christus, unus videlicet in persona Deus et homo, et qua ipse est unus in natura cum ecclesia per assumptam humanam naturam, et insuper qua ecclesia reunitur ei per condignam assumpcionem, in sacramento eucaristie, illius carnis quam assumpsit de virgine, in qua crucifixus, mortuus est et sepultus, et a mortuis resurexit, et ad celos ascendit, iterum venturus iudicare vivos et mortuos. Ex quibus tribus unionibus videtur aggregari unum quo dicitur Christus integer unus...[11]

An aggregate must be perceived by the mind. It is a powerful mind that possesses the ability to accomplish this task, namely, to impose order and

---

[9] Pseudo-Rhabanus (Paschasius Radbertus), *De corpore* I,6 (*PL* CXX, col. 1272A); Grosseteste, *Hexaemeron*, p. 314. For "tree of life" symbolism, see Gerhart B. Ladner, "Medieval and Modern Understanding of Symbolism: A Comparison," *Speculum* 54 (1979), pp. 223-256.

[10] Grosseteste, *Hexaemeron*, p. 204, quoting Augustine, *De Genesi ad litteram* III, 16 [*CSEL* 28, 1, 81-82].

[11] Grosseteste, *Hexaemeron*, p.49.

integrative control upon many particulars and place them within one unity. This, after all, is one of the tasks of cognition. Grosseteste also treats the order that must exist between the parts. The fact that an aggregate contains many parts necessitates an order among the parts: "...de istis partes erunt ordinabiliter ad istam sapienciam pertinentes. Creature eciam omnes, in quantum habent essentialem ordinem..."[12]

Grosseteste's modes show something. They demonstrate; they expound. His modes distinguish, they divide, hence can be intellected: "Potest tamen hec particula tot modis distingui et intelligi, quot modis illud superius dictum: *et dividant diem et noctem.*"[13] The term, *modus exponendi* is used frequently by Grosseteste, there are six of these modes.[14] They are fashioned or made, that is, fictive, therefore, have character. These six *modi exponendi* are demonstrative, mobile, and they occur above and below, that is, have levels that are *superior* or *inferior.*[15]

Modes are constructed manipulations of material. As Grosseteste in his *Hexaemeron* commentary states, uncreated primordial material was formed or exposed in six days and formed into created things. Again, we are given some indication of contemporary interpretation of Grosseteste's works by the chapter headings added by Adam Marsh, his student and close associate. The chapter which deals with the formation of chaos is headed by the designation: *Sermo in assignandis sex modis exponendi principium huius scripture quod est de operibus sex dierum, et declarando quis modus cui dierum apcius conveniat.*[16]

Modes are diverse. In making this clear, an important equivalence is expressed, namely, that modes are *passiones*, therefore, designate movement. The two expressions are interchangeable.[17] In many contexts, Grosseteste gives forth the concept of diverse modes, as, for example, in this context in which he quotes Hugh of St. Victor:

> Divine claritatis radius qui spiritualiter lucentes illuminat, quamvis in se unus permaneat, participatione tamen et distribucione donorum varie multiplicatur, quoniam multis diversisque modis distribuitur et multiplicatur. Hec vero multiplicacio et variacio universorum est pulchritudo, quoniam nisi dissimiliter pulcra essent singula summe pulcra

---

[12] Grosseteste, *Hexaemeron*, p. 50.

[13] Grosseteste, *Hexaemeron*, p. 176.

[14] Grosseteste, *Hexaemeron*, p. 341 (I:3), again, Adam Marsh's subtitles summarize content.

[15] Grosseteste, *Hexaemeron*, p. 344 (III:14).

[16] Grosseteste, *Hexaemeron*, p. 341 (I:3).

[17] Moerbeke's translation of *pathos* is consistently *modus*, but there are many other examples of this implied equivalence, and evidence for believing that a long tradition for the concept of *modus* expressed as *passio* obtained. Cf. Grosseteste, *Hexaemeron*, p. 168: Recipit enim multas passiones et impressiones...et recipit etiam motus... (see also Richard Fishacre, *Commentarius in IV Libros Sententiarum* II,d.24 [Oxford, Balliol College Ms 57, f. 130c], to which the editors of this passage draw attention.

non essent universa simul. Non enim aliquod ex universis capere potuit, quod erat pulcritudinis totum, et iccirco summa pulcritudo varia participacione distributa est in singulis, ut perfecta esse posset simul in universis. Ipsa vero distributio multiplicatur optime et pulchre: optime in universis, et pulcre in singulis.[18]

The concept of diverse modes is often reiterated. We find, for example, in Adam Marsh's chapter headings, the expressions: *sermo in ostendendo diversitates auctorum/...et ostendendo modos possibiles diversos quibus/ sermo ostendens varias intelleciones eius quod dixit facta esse luminaria ut dividant diem atque noctem, et sunt in summo modi 3, per subdivisionem vero modi.*[19] Modes can be diverse because they originate in diverse materials, that is, each mode "participates" in a different material, as Grosseteste, quoting Aristotle, states.[20]

Furthermore, modes are related to time. Terms indicating condition, time, succession, and the concept of successive time-lapse can be noticed, especially in the *Hexaemeron* commentary text itself, as well as in Adam Marsh's headings to the individual chapters of this work.[21] Space, as a time interval, congrues with animation in Grosseteste's conception of a mode.[22] This concept, among all the aspects of Grosseteste's mode concept, found resonance in writing about music as a quadrivial art. First, music exists in time, therefore, the concept of modes of time, perfectly integrated with animation or motion within time, could certainly be applied to music. We will see that this was indeed the case, in a new method for analyzing varieties of constructed motion.

Modes delineated properties—even the properties of "mystical things"—such as light. Again we see in Adam Marsh's chapter headings, such as: *usque ad opus diei secunde, et sunt IX modis quos ponit/ Sermo in ponendis naturalibus lucis proprietatibus quibus intelligi valeant eciam proprietate*

---

[18] Grosseteste, *Hexaemeron*, p. 216.

[19] Grosseteste, *Hexaemeron*, pp. 342/343/346.

[20] Grosseteste, *Hexaemeron*, p. 213: Cibantur autem animalia diversimode secundum diversitatem materierum ex quibus est eorum substantia, a quotation from Aristotle, *History of Animals*, VIII, 1 (588b).

[21] See Adam Marsh's heading in: Grosseteste, *Hexaemeron*, p. 342 (II:22):...et contra successivam mundi condicionem per sex dies temporales...

[22] Grosseteste, *Hexaemeron*, p. 287 (modes of generation with time):....unicum habent generacionis modum quo generabantur in temporis principio de materia creata ex nichilo, qui modus sufficienter expressus est in superioribus, non addit hic aliquid de eorum generacione, sed repetit et addit de generacione terre nascentium et hominis, quia nunc habent alterum modum generacionis quam habuerunt in principio, ut distinguat modum generacionis nunc currentis a modo generacionis qui tunc erat, ne putemus unimodam esse generacionem que est nunc ei que fuit tunc, sicut putaverunt quidam mundi sapientes quod solus ille modus generacionis qui nunc est manifestus semper fuisset et nunquam fuisset modus alter. Modes are frequently expressed as intervals of time.

rerum mistice signatarum, et sunt 20 modi quos ponit.[23] Further, modes are characteristic and recognizable.[24]

Grosseteste brings measurement and mode together conceptually by mentioning both in close proximity to one another, as in the following statement: "Et ideo secundum allegoricas et morales significaciones merito dicitur dies ille benedictus et sanctificatus; utpote ad quem pertinet vere benediccionis et sanctificacionis mensura et modus."[25]

Since modes divide, are particular, and diverse, being contained within a larger unity, the concepts of connection and order within various particulars are mentioned nearly as frequently as the concept of mode itself. The connecting agent, or *copula*, is a term which takes on new significance within this context. Terms such as *ordo*, *ductus*, *perfectio*, *modus*, *figura*, and *copula* all find specificity and discrete place within an entire, new construct. Grosseteste, in excerpts selected from this passage, brings these terms conceptually together, and, by their contexts infuses them with significance:

> ...cum res carens superfluo et diminuto adheret et *copulatur pro modo* suo summe et prime simplicitati...in ipsis numeris *dictos modos perfeccionis*...Propter *hoc modos perfeccionum trahunt*...discurrit et *ordinatur*...et maxime illa que habent *ad alia ordinem* et racionem perficientie. Propter hoc planete *ordinantes* et moventes et alterantes hunc mundum inferiorem consistunt, ut creditur, in septenario...*variacione* septem *figure*...[26]

In the context of formation and congregation, *modus* as a term often occurs with *figura*. In this passage from the *Hexaemeron* commentary, *omnes dictos modos* is followed by *figura*:

> Qui transitus diligenter consideratus et veraciter agnitus velud aqua producit de se omnes dictos modos bonorum reptilium et volatilium. Quis enim, agnoscens veraciter quam velociter preterit figura huius mundi et quomodo transeunt omnia tanquam umbra, non contempnit mundum cum humilitate et timore, se perscrutans et alis dileccionis se ipsum ad celestia provehens? Idem quoque mundi transitus amatus, ac per hoc incognitus, ipsius enim amor mentis obscurat aspectum, producit omnes modos malorum reptilium et volatilium.[27]

---

[23] Grosseteste, *Hexaemeron*, p. 343.

[24] Grosseteste, *Hexaemeron*, pp. 318ff. in which Grosseteste discusses modes as manifesting characteristics, or making a characteristic quality manifest: Sed is est modus victorie (crocodile).

[25] Grosseteste, *Hexaemeron*, p. 280; see also pp. 215, 297 (mode and time): ...qui secundum hunc exposicionis modum omnes erant simul in indivisibili principio temporis, adhuc temporaliter eiecit Deus de terra omne lignum secundum formam et speciem perfectum.

[26] Grosseteste, *Hexaemeron*, p. 282 (italics added. These terms have been removed from their syntax in order to show their occurrence within close proximity).

[27] Grosseteste, *Hexaemeron*, p. 195.

Figura, in this context implies characteristic shape within the flow of a course of events, as a characteristic component in the passing time sequence of this world.

For Grosseteste, there are modes of generation and of "leading out:" "Nunc autem insinuat modum generacionis et educcionis in esse eorum maxime que nunc aliter generantur et educuntur in esse quam generabantur in prima condicione."[28]

Within his mental image of these modes, namely what they can do—their efficacy, place, and functions—there are characteristic shapes or indicators which identify these modes. This is the direction of his use of *figura* within a concept of *modus*. Modes of motion are indicated by figures.[29] There are six such modes of motion:

> Sed forte, cum tempus sit mensura motus et operacionis, nec habeat tempus esse nisi in mocione, nec mocio habeat esse nisi in eo quod movetur, erunt naturales differentie mocionem per naturales differentias mobilium, et naturales differentie temporum per naturales differentias mensuratarum mocionum...videtur quod sex sint mociones naturaliter differentes quibus educte sunt in esse sex partes universitatis, et per consequens quod sex sint naturales differentie dierum sex primarias mociones mensurantium.[30]

Modes of generation, in Grosseteste's writing, are frequently related to time: "...*quando create sunt*, insinuat modum quemdam et circumstancium quandam generacionis omnium...et quod mundus non sit coeternus Deo sed creatus in temporis et cum temporis principio, quod insinuatur per hoc adverbium 'quando'".[31] and:
"Cepit igitur mundi creacio ex nichilo et ex diurni temporis inicio, quem modum generacionis mundi negant plerique philosophi. Tempus igitur diurnum, a quo cepit mundus secundum sui instans primum, est mensura condicionis celi supremi et terre secundum perfeccionem specierum suarum."[32] *Mode*, for Grosseteste, is connected to *time*:

> Uno namque modo dicitur tempus morarum spacium quod a futura expectacione per presens in preteritum transit...Alio vero modo dicuntur tempora, ut dicit Augustinus, "que per sidera fiunt, non solum spacia morarum, sed vicissitudines affeccionum celi huius." Hec igitur tempora, id est distinctas et determinatas et signabiles morarum dimensiones, primo

---

[28] Grosseteste, *Hexaemeron*, p. 286; the passage contains several formulations of the concept of modes of generation, or the generative capacity of modes: vult demonstrare et significare predictas rerum educciones in esse, et subsequenter dicendos modos generacionum.

[29] See pp. 118-120, as well as a discussion of "figures" of the moon within in its motions, p. 283.

[30] Grosseteste, *Hexaemeron*, p. 268: there are six primary motions which can be measured.

[31] Grosseteste, *Hexaemeron*, p. 286.

[32] Grosseteste, *Hexaemeron*, p. 287: the expression *modi generationis* is also used *in superioribus*: qui modus sufficienter expressus est in superioribus....

> fecerunt sidera ordinatis motibus discurrentia. Simpliciter autem tempus est mora et numerus motus rerum mutabilium...Possunt quoque per 'tempora' hic intelligi horarum distinctiones.[33]

Time, measure, mode are three terms/concepts that appear frequently and have obvious importance for Grosseteste. In his discussion of these three concepts, one crucial idea emerges, namely, that there are six primary modes of measured motion in time. Modes of motion are regulated by time and are indicated by figures. Within a fast-paced discussion of creation and a differentiation between an instant of time and its generating force composed of many moments, a combination of two concepts appears to have explicative power for this thirteenth-century writer. They are *figura-modus*. We will again encounter this particular combination of concepts in writing concerning music during this century. Grosseteste's background—which is essentially theological—for the two concepts imparts to them an intellectual content; their appearance and use in writing concerning music grants them an exemplary dimension, perceptible to eye and ear, and also makes clear exactly what these "modes of measured motion" are.

Modes express. What has been generated becomes manifest. Notice how frequently, in this passage, the concept of modes of generation is mentioned:

> ...continuato per revolucionem usque in consummacionem...unicum habent generacionis modum quo generabantur in temporis principio de materia creata ex nichilo, qui modus sufficienter expressus est in superioribus...quia nunc habent alterum modum generacionis quam habuerunt in principio, ut distinguat modum generacionis nunc currentis a modo generacionis qui tunc erat...quod solus ille modus generacionis qui nunc est manifestus semper fuisset et nunquam fuisset modus alter.[34]

Modes are states. They are distinguished, one from another, and, in this context, there are six of them: "Possunt eciam et isti sex dies significare sex etates hominis novi, hoc est, per sacramentum baptisimi regenerati. Que etates non annis sed provectibus distinguntur."[35]

Modes are distinct and, therefore, distinguish or grant qualitative characteristics because they are separate. They, by the pungency of their

---

[33] Grosseteste, *Hexaemeron*, pp. 172f, cf. Augustine, *De Gen. ad litt.*, II, 14 (*CSEL*, XXVIII, 1, 53-54). William Waite mentioned in his introduction to *The Rhythm of Twelfth-Century Polyphony: Its Theory and Practice* (*Yale Studies in the History of Music*, ed. L. Schrade, II [New Haven, 1954], especially pp. 38, 127), that the new relationship of time indicated by music notation in the late twelfth century was, in all probability, influenced by Augustine.

[34] Grosseteste, *Hexaemeron*, p. 287.

[35] Grosseteste, *Hexaemeron*, p. 257. The passage establishes the equivalency: states=days=modes. There are six of each: sex primorum dierum, sex mundi etates, sex hominis etates naturales, sex diebus primis possunt adaptari, sex spiritales etates, sex luces, sex illuminacionibus mentis humane (see Adam Marsh's chapter headings, p. 350). There are also six modes of rhythmical motion, to be investigated below.

differing formats, divide: "Facta sunt igitur luminaria ut istis modis dividant diem et noctem...Dies autem, ut dictum est, est presencia luminis solis super terram, et, secundum Augustinum, dies factus est propter vigiliam et propter motus et acciones vigilie convenientes."[36]

One feature that distinguishes modes, and on which basis they are divided, is the presence and absence of motion and action. Concepts of motion within an extended continuity frequently appear in discussions utilizing the term "mode." The other significant component that Grosseteste consistently relates to a concept of mode, is part, as well as a collection, or society of parts, within a totality. Expressions such as *per modum ambulacionis*, *per modum colleccionis ipsius elementi ex utraque parte moventis* and *in latus extento*, in various formulations, but containing variations on the same concepts, abound.[37] Modes, in their respective motions, "run on."[38]

An appropriate analogy to "mode" is "particle" within "syntax;" therefore, complete understanding of what modes are and do when they function together is "syntax." One can easily understand that modes—as diverse, particular, parts of speech—were important to speculative grammarians of the thirteenth century—so important that the group was named "modistae."[39]

One final aspect remains to be added to an already complex and variegated concept, namely, that modes are indicated by signs. Sign and mode occur often in close proximity, as, for example, "Sunt eciam quinto modo luminaria in signum consummacionis seculi..."[40] and, again, in Adam Marsh's interpretatory chapter heading: *Sermo ostendens quomodo luminaria sunt in signa, et sunt quinque modi.*[41]

Grosseteste, by utilizing the term *modus* so frequently and emphatically, sets up the following equivalent expressions for mode. They are all simultaneously properties of the term, and all of them must be taken into account in order to appreciate the multivalence of the concept. *Modi* are equal to, and can be described by *passiones*, *dispositiones*, *impressiones*, *etates*, *signa*, *motiones*, *actiones*, *distinctiones*, *educciones*, and

---

[36] Cf. Grosseteste, *Hexaemeron*, pp. 162f. for modes distinguished by the presence and absence of motions and actions.

[37] Cf. Grosseteste, *Hexaemeron*, p. 209 for modes of motion collected together.

[38] Cf. Grosseteste, *Hexaemeron*, p. 287:...ut distinguat modum generacionis nunc currentis a modo generacionis qui tunc erat...as well as the passage which follows, for composite "modus condicionis hominis;" and, again, see Adam Marsh's headings which indicate an interpretation of the content of these chapters, p. 345 (IV:18): Sermo in ostendendo modum et ordinem germinacionis temporaliter decurrentis usque in finem; exemplum huius prime precepcionis.

[39] See van Deusen, "The Musical 'Modistae'" in: *The Harp and the Soul*, p. 281.

[40] Grosseteste, *Hexaemeron*, p. 163; the entire large context deals with sign, and modes of signs.

[41] Grosseteste, *Hexaemeron*, p. 346, V:7.

participationes. There are *modi per duccionis*, *modi exponendi*, *modi distributui*, *modi generationis*, *modi perfectionis*, or *modos perfeccionis...propter hoc modos perfeccionum trahunt*, *quatuor modos qualitatem*, *modi currentis*, even a *modus condicionis humani*, and a *modus victorie*; and the modes bring into the discussion such verbs as *aggregare*, *conglutinare*, and the expression, *collocatus*. When aggregate expressions, such as *copula*, are used with concepts of order, or organization, the terms, *ordo* or *ordines*, are also used. A mode "expresses sufficiently" or is sufficient <unto itself> to express (*modus sufficienter expressus est*). Modes can be signs (*in signa et sunt quinque modi*); they are components in cognition, and they are particulars in the recognition of an entire, unified, totality. Modes "progress in their formations, in order to demonstrate and signify."[42] In other words, the term is appropriate to, and useful for analysis.

Did this intense discussion and the resulting multifaceted concept of mode influence writing concerning music? In the anonymous treatise, under discussion here, the term is indispensable. Let us observe how *modus* is used, and what connotations it carries. First, the concept of mode as a particular within an aggregate, or collection, which forms a totality, is an important and frequently-encountered concept in "Anonymous IV's" treatise. The concept of aggregate also brings to mind—and to discussion—the idea of division, or "breaking up." "Quod si iste modus reducatur ad modum secundum, dividatur vel frangatur iuxta ordinem fractionis eiusdem, si ad primum, secundum ordinem primi frangatur."[43]

Both the process of constructively "bringing together" and its counterpart, division, or the process of "breaking up" in order to observe and scrutinize—in short, the analytical process—leads to a concept of *ordo*. The parts within a whole, separated into particulars, must be organized and ordered for the process of analysis and interpretation to take place.[44]

Secondly, the anonymous writer, like Robert Grosseteste, also emphasizes the demonstrative value of the term *mode*, its ability to distinguish and divide, as well as its use in the analytical process. Modes are

---

[42] Grosseteste, *Hexaemeron*, p. 19 (both phrases frequently occur): "Totus progressus formacionis"/"vult demonstrare et significare."

[43] *Anonymus IV*, ed. p. 39.

[44] The concept, *ordo*, occurs in many context. Cf. *Anonymus IV*, ed. p. 22: ...ordinaverunt sic procedendo: modus vel maneries vel temporis consideratio est cognitio longitudinis et brevitatis meli sonique. Modi generales sunt sex; p. 23: Ordo modi est numerus punctorum ante pausationem; qui quidem ordo sumitur a suo principio ordinato; p. 24: Deinde subsequenter fac alium ordinem punctorum, nisi ille ordo fuerit sufficiens secundum quod melius pertinet in modo; p. 37: ...cum quibusdam aliis et ordinibus, prout superius dictum est. Secunda vero pars <est> de minutione vel fractione eorundem, sive fuerit per modum fractionis vel collectionis cuiusque brevis vel longae; p. 51: Secundus ordo crescit per duas ligatas plus cum proprietate et perfectione supra primum ordinum; as well as pp. 57, 58, 59, 60, 62, 73, 77.

created or "fictive," have character, and mobility. Modes are functional within a cognitive process:

> Gallici vero Parisius habebant omnes istos modos supradictorum, prout in libris diversis a diversis notatoribus plenius patet, ad cognitionem quorum sic procedimus.[45]...et cum longa pausatione sequenti ad aequipollentiam duarum brevium. Et sic intelligatis de omnibus aliis imperfectis eiusdem modi supradicti. De singulis eiusdem satis patet per se una cum consideratione ipsius eiusdem modi intellectualis...[46]

The concept of equivalence, that is, the substitution of one object for another in the cognitive process is frequently discussed: "Sed per modum aequivocationis accipiebantur, quod quidem modo non est, quoniam in antiquis libris habebant puncta aequivoca nimis, quia simplicia materialia fuerunt aequalia. Sed solo intellectu operabantur dicendo: intelligo istam longam, intelligo istam brevem."[47]

Thirdly, modes are diverse and multiplex. The concept of diverse *passiones*, or of multiple, diverse modes is frequently found in the anonymous treatise. [48] Even an entity described as the absence of the modes of tones, or "pauses" (rests) within musical time-lapse, is multiplex.[49] Fourthly, modes, also for the anonymous writer, delineate properties of "mystical things." They are characteristic and recognizable.

Mode is associated with measurements:

> Una est, quando in discantu et in tenore fuerit modus rectus, id est, cum fuerit ex utraque parte modus secundum longitudinem rectarum longarum et rectarum brevium, et sic dicitur rectus ad rectum. Est et alius modus, qui dicitur habundans supra rectam mensuram rectae longitudinis et rectae

---

[45] *Anonymus IV*, ed. p. 51.

[46] *Anonymus IV*, ed. p. 55.

[47] *Anonymus IV*, ed. pp. 49f: this concept of the equilibrium of seen for unseen things, in which visible objects—such as music notational signs—could be substituted for unseen, but potentially heard musical phenomena, would have been reinforced by the Latin translation of Plato's *Phaedo*, which became available, and was enthusiastically received, at the time of the writing of this music treatise. See the chapter on this subject, "Composite Harmony: An Aspect of the Conceptual Background to the Problem" in this volume, below.

[48] *Anonymus IV*, ed. p. 84:...et sic colligimus *diversos modos melodizandi in hac parte* (italics have been added). Further, on the subject of the multiplicity and diversity of the modes: cf. *Anonymus IV*, ed. pp. 26f: ...sed de proprietate et conditione materiali figurarum omnium supradictarum et postposit<a>rum. Cognitio e<a>rundem est habenda...; p. 40: Omnis sensibilis proprietatis notitia plenam, perfectam et ultimam perfectionem intelligentiae tribuit veritatis;

p. 74:...quod fit multiplici modo tam ex parte <dis>cantus quam ex parte tenoris; p. 82: Nunc transeamus ad finale propositum sub tali forma. Sciendum, quod multiplex via et multiplex numerus modorum voluminum, ut supradiximus, contigit in talibus; and finally, p. 69: Et nobilissimo modo istae symphoniae inter se differunt. The most noble mode of all is a *symphonia* of all the different modes.

[49] *Anonymus IV*, ed. p. 57: Pausationum multiplex est modus.

> brevitatis, et dicitur contra ultra mensuram, vel potest dici modus obliquus transumptive...[50]

Modes occur in an ongoing, longitudinal process. Modes imply processionality. The terms *ducere*, *dirigentur*, *trahunt,* and *perducit* occur frequently in the anonymous treatise.

> Et per continuationem discretionis modi antedicti post ipsam pausationem, si fuerit perfectus vel imperfectus, potest dici, quod talis modus est post sicut ante. [51] ...<qui> faciunt semper quinque, sive procedunt per modum discantus sive non, ut patet inter conductos simplices, duplices, triplices, et quadruplices, si fuerint. [52]

Finally, Grosseteste's most important idea—namely, his presentation of six primary modes of measured motion in time, which are regulated by time, and indicated by figures—is exemplified in music. The main point of this section of the anonymous music treatise is the discussion of the six modes of rhythm. The modes are particular; each has format and character, and they all occur within the measurable time-lapse of musical syntax. The anonymous music writer, in his discussion of rhythmic modes, applied a concept which was important, precisely-defined, and multivalent in meaning—one which would certainly have been clearly understood by his readership. Anonymous IV's "modes" are distinctive motions, which, in analysis, could be recognized and identified. When they were put together within the longitudinal process of musical syntax, they formed the component parts of rhythmic movement. The subject is important to this anonymous writer, and it is one to which he frequently returns, as, for example: "Prima pars erat de sex modis temporis melorum, prout soni vel meli integre accipiuntur vel possunt vel poterunt sumi, cum quibusdam aliis et ordinibus, prout superius dictum est. Secunda vero pars <est> de

---

[50] *Anonymus IV*, ed. 76. Measurement also implies "beyond measure," p. 77: De reliquis pone tenorem loco discantus, sicut omnes illi, qui sunt de ultra mensuram, et alios modos omnes pone loco tenoris. Time concepts related to modes and measurement are frequently found in the anonymous treatise, p. 57:...quod tractat de pausationibus temporum sonorum, et hoc per hunc modum: pausatio est quies vel dimissio soni in debita quantitate temporis vel temporum longae vel brevis alicuius modi modorum sex supradictorum...Tempus vero eius consideratur iuxta ordinem longarum et brevium modi ante ipsam coniuncti immediate, sive fuerit primi vel secundi etc. Si fuerit primus modus perfectus ante ipsam coniunctim immediate, sic erit simplex pausatio brevis unius temporis.

[51] *Anonymus IV*, ed. p. 57, selected from many quotations which focus upon the concept of modes within continuity or a longitudinal process.

[52] *Anonymus IV*, ed. p. 60. *Conductus*, in this case, refers to musical syntax within time-lapse, not necessarily to a musical genre. Concerning context, cf. p. 63: *Ter terni sunt modi, quibus omnis cantilena contexitur, scilicet unisonus, semitonium, tonus, semiditonus, ditonus, diatesseron*...p. 71: De universali modo sic procedimus...and p. 75: Aliter: si fuerint tria puncta, et unus ascendit et descendit vel descendit et ascendit etc., discantus debet opposito modo operari, si naturaliter habet. It is significant that this anonymous writer is the only, among several near contemporaries, who uses *operari*.

minutione vel fractione eorundem, sive fuerit per modum fractionis vel collectionis cuiusque brevis vel longae."[53]

Lacking acquaintance with the immense medieval background of this term, and the changes through which the term had undergone in the thirteenth century, music historians of the earlier portion of this century misunderstood the concept of "rhythmic modes," as described by the anonymous author on music, believing that they referred to the totality of rhythmic motion within a piece, rather than discernible parts. They misunderstood the thirteenth century function of "modes" as components within the process of analysis. The designation of modes was a tool to delineate, describe, and demonstrate the varied rhythmic motions which were possible for the human voice to sing. This misunderstanding of *part* for the *whole*, of component in analysis for the whole of syntax, had considerable consequences. As the result of the belief that an entire composition should evidence one rhythmic pattern, genres of thirteenth century music have been transcribed and sung in one rhythmic pattern, as for example, the first mode, which contrasts a longer value with a shorter. The effect is to exclude rhythmic variation of any kind, resulting in compositions of almost deadening repetitiveness. Generations of scholars, in addition, have argued over which of the six modes a given piece should be "in."[54] The example of the rhythmic modes given here, is a clear indication of the importance of making the connection between medieval music theoretical treatises and

---

[53] *Anonymus IV*, ed. p. 37; see also pp. 40, 57, 74, in which there are many instances of the relationship of *modes* to *time*. This preoccupation, presented in just this manner, appears to be unique to this anonymous writer who seems to be particularly interested in the physical properties of time.

[54] See n. 3 above. The earlier medieval use of "mode" (*tonus*) referred to the totality of a given section of chant, in which the same melodic gestures, based on the typical melodic intervals and patterns of a described mode (*tonus*) were present throughout the piece. If this were not the case, confusion, even moral turpitude, according to the tenth-century theorist, Regino of Pruem, resulted: Scire autem oportet peritum cantorem, quod non omnis tonorum consonantia in quibusdam antiphonis facile cognoscatur. Sunt namque quaedam antiphonae, quas nothas, id est, degeneres et non-legitimas appellamus, *quae ab uno tono incipiunt, alterius sunt in medio, et in tertio finiuntur*: quorum dissonantiam et ambiguitatem in breviario operis subsequentis suis in locis patefecimus. Sed tamen ut evidentior ratio clarescat, nonnullas exempli causa hoc in loco inferimus...Hae praedictae antiphonae *a septimo tono incipiunt, et quaedam in primo, aliae in quarto finiuntur tono* (*De harmonica institutione* [*GS* I, 231], italics have been added). Music historians of the first two generations of this century assumed that the apparent meaning of *modus-tonus* as totality remained the same throughout the period from ca. 900 to 1600. They did not take into account the facts that the equivalence modus-tonus is never made in the thirteenth century, that is, mode is never equated with tone, and, further, more importantly, that the connotations of the term *modus* were transformed by thirteenth-century discourse on the subjects of cognition and analysis. New Aristotelian concepts and the intellectual tools which resulted from their use, made revolutionary changes in what appeared, on the surface, to be identical terms. "Mode" is an example of this. One can find out quite simply which terms come into question, since they are used constantly during the period under consideration.

their intellectual background; between the use of important terms in other disciplines, and the use of identical terms in the study of music.

Mode I:	long/short
Mode II:	short/long
Mode III:	long/short long
Mode IV:	short long/long
Mode V:	long long long
Mode VI:	short short short

(Example: These modes have been applied by twentieth-century editors, to entire compositions of music in terms of the transcription of thirteenth-century notation into modern notational signs, so that a lengthy musical syntax repeats, from beginning to end, the same rhythm format as in the transcription which follows.)

Cognition is the point of the term *mode*. In cognition, the mind sets up a series of equivalent relationships. In musical notation, a sign, by the process of equating one object for another, is equated to musical material, as Anonymous IV states: "Sed per modum aequivocationis accipiebantur, quod quidem modo non est, quoniam in antiquis libris habebant puncta aequivoca nimis, quia simplicia materialia fuerunt aequalia. Sed solo intellectu operabantur dicendo: intelligo istam longam, intelligo istam brevem."[55]

The equivalence of music notation with rhythmic duration and motion is one of the revolutionary results of this discussion, in which, as the writer states, "the intellect alone" makes the connection of sign to duration. Anonymous IV's writing on this subject abounds in expressions indicating intellection, cognition, substitution of sign with material substance, and equipollence. "Modes" function within a process of analysis.[56]

The concept of mode has its context within the arena of particulars, that is, of parts within a totality. Analysis seeks to distinguish and separate out *partes*; syntax corresponds to the reality of a complete sentence or, as an analogy, the complete course of the musical work. In short, *syntax* connects multiplex analytical *parts*: "Multiplex superpartiens continet totum multotiens et multas partes; cuius species sunt duplum superbipartiens, duplum supertripartiens etc...Et coniunge quamlibet speciem multiplicitatis cum omnibus speciebus superparticularitatis, ut supradictum est de multiplici superparticulari."[57]

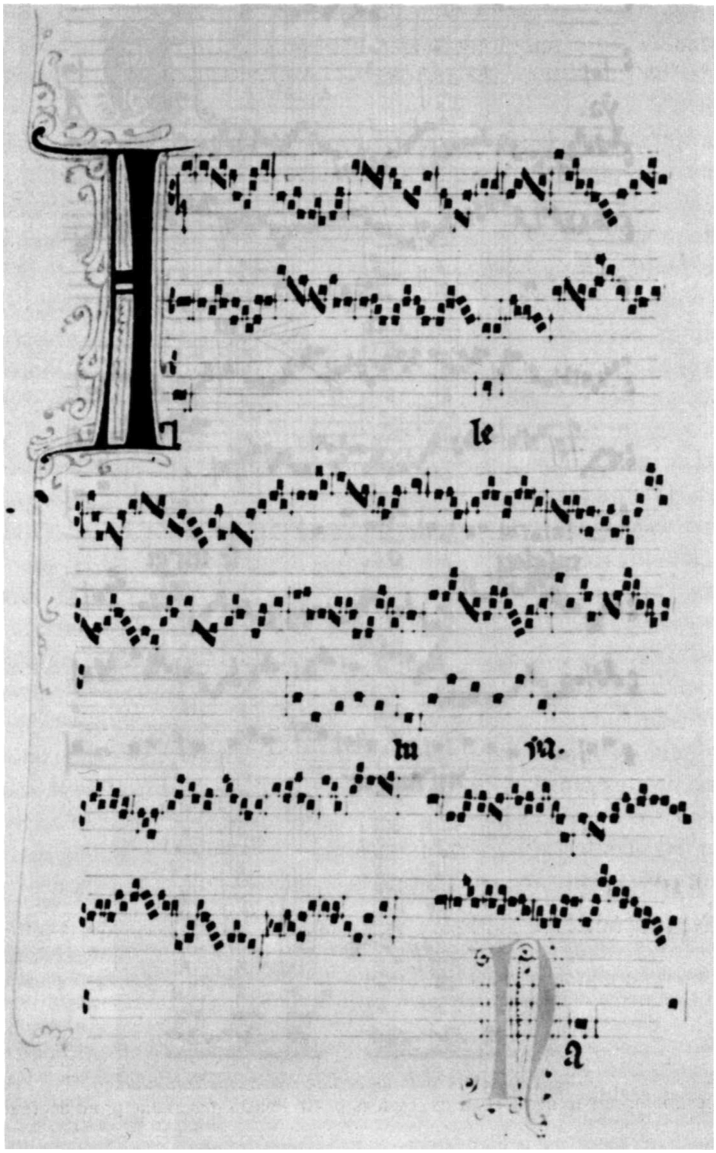
---

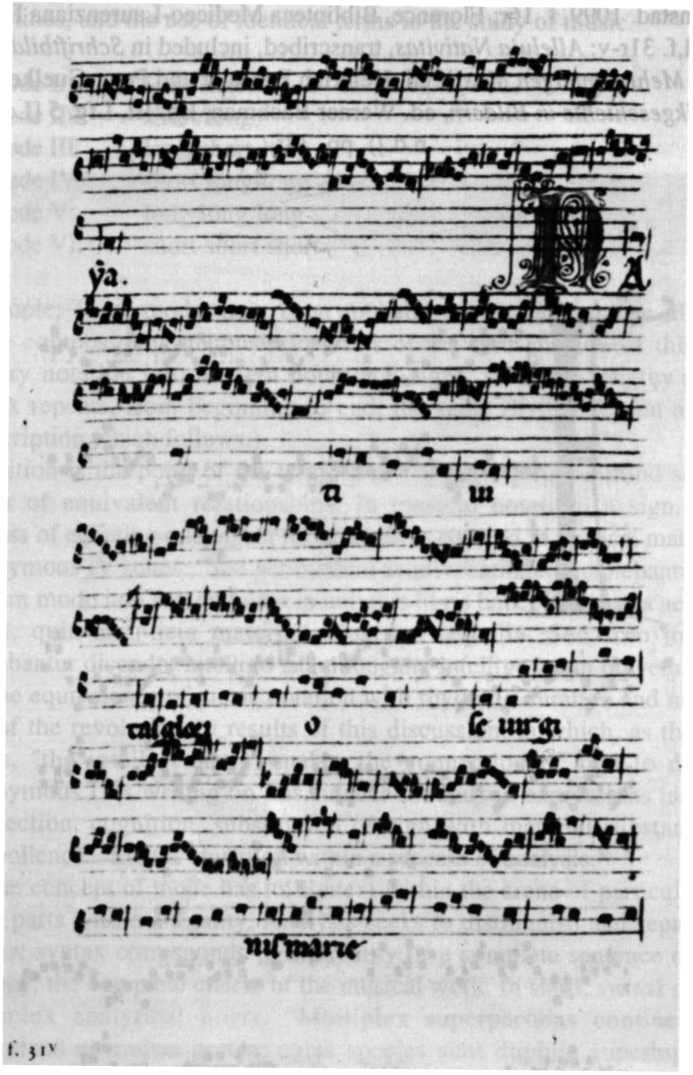
[55] *Anonymus IV*, ed., pp. 49f, see also p. 50: Maxima pars cognitionis antiquorum fuit in praedictis...(cf. p. 81). Expressions such as *eodem modo intellige* abound. The concept of signification occurs in many contexts, such as p. 40: Puncta materialia, prout depinguntur in libris et prout significant melos et tempora supradictorum, duplici acceptione accipiuntur...

[56] *Anonymus IV*, ed. p. 55, quoted above.

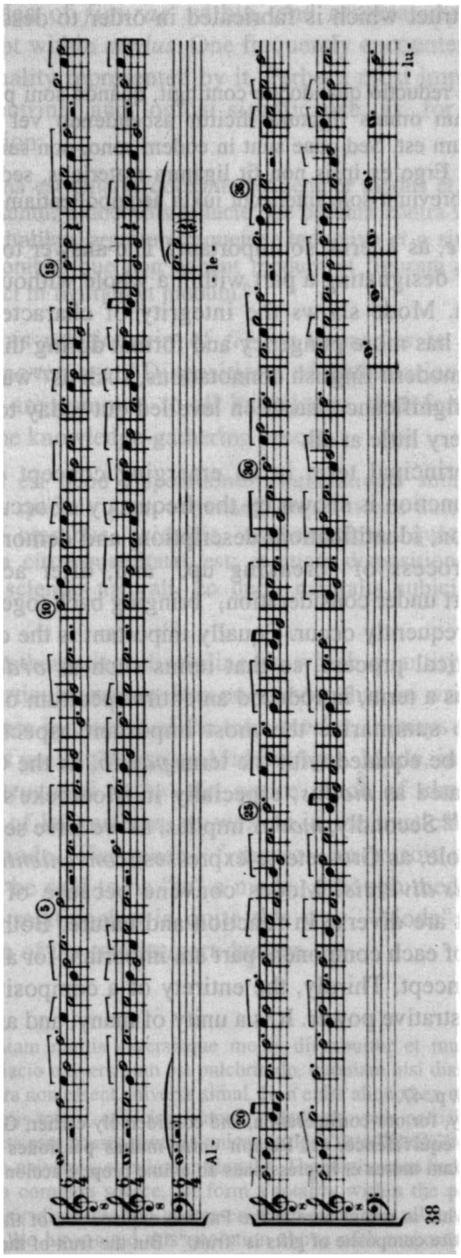
[57] *Anonymus IV*, ed. p. 68.

Example: Facsimiles of Wolfenbuettel, Herzog-August Bibliothek 1206 Helmstad. 1099, f. 16r; Florence, Biblioteca Mediceo-Laurenziana Pluteo 29,l,f. 31r-v: *Alleluia Nativitas*, transcribed, included in *Schriftbild der Mehrstimmigen Musik,* ed. Heinrich Besseler and Peter Guelke (*Musikgeschichte in Bildern,* ed. Werner Bachman, Bd. III, Lfg. 5 [Leipzig, n.d.]), pp. 38f.





f. 31v


Al-
- le -
- lu -
38

Modes occur in a context which implies, or directly considers, reduction, an artificial construct which is fabricated in order to describe component parts:

> Quae quidem reductio quandoque contingit, quando soni ponuntur in eodem sono, quoniam omnis ligatura dicitur ascendendo vel descendendo, ut superius dictum est. Sed quae sunt in eodem sono, non sunt ascendendo vel descendendo. Ergo ex ipsis non fit ligatura materialis, sed per reductionem longarum et brevium solo intellectu iuxta aequipollentiam bene ligantur.[58]

Why was *mode*, as a term, so important? The answer to this question is that it is a way of designating a part within a whole without compromising either expression. Mode shows the integrity of characteristic definable quality. The term has more pungency and format during this period than is evidenced by its modern English connotations, such as "way" or "manner." Furthermore, its significance has been levelled out today to such an extent that it connotes very little at all.

Modus is a principal term in an emerging concept of analysis and cognition. This function is shown by the frequency of occurrence of terms implying reflection, identification, description, and demonstration. Terms connoting the process of "breaking up," and, after achieving clarity concerning the part under consideration, "bringing back together," as well as of clarity itself, frequently occur. Equally important is the concept of order within the analytical process, so that terms such as *ordo*, *ordines* also abound. *Modus*, as a term, introduced an entire spectrum of considerations and meaning. To summarize the most important aspects of this term, *modus*, first, can be equated with the term *passio*, as the Greek *pathos* is most often translated as *modus*, especially in Moerbeke's translations of Aristotelian texts.[59] Secondly, *modus* implies, as we have seen, a concept of parts within a whole, as Grosseteste expresses: *convenientia in intentione, diversitata in illis diversis*. Modes convene because of their common intentionality, but are diverse in function and nature. Both the convening and the diversity of each component part are important for an understanding of *modus* as a concept. Thirdly, the entirety of a composite of individual modes has demonstrative power. It is a unity of many, and among many.[60]

---

[58] *Anonymus IV*, ed. p. 47.

[59] More importantly, for our consideration, and considerably earlier, Grosseteste, in many cases, expresses this equivalence, as: Recipit enim multas passiones et impressiones a sideribus, et recipit eciam motus et impressiones ab anime proprie accionibus (*Hexaemeron*, p. 168).

[60] An analogy to what is meant here is the Pauline explanation of the gifts of the Holy Spirit, in which the entire composite of gifts is "fruit:" "But the fruit of the Spirit is love, joy, peace, longsuffering, gentleness, goodness, faith, meekness, temperance: against such there is no law" (Galatians 5,22), to which reference is made by Hugh of St. Victor, quoted by Grosseteste (*Hexaemeron*, p. 216): Divine claritatis radius qui spiritualiter lucentes illuminat, quamvis in se unus permaneat, participatione tamen et distribucione donorum varie

Modes are recognizable because they contain figures, or demonstrative gestures. The idea of *figurae* within, and associated with *modi* is an important concept within *modus*. One frequently encounters this word-pair, as well as the duality represented by it. Perhaps most importantly, the pair of terms has doctrinal and logical significance, as, for example, in the following quotation:

> ...et causa una est quia in doctrinis est semper modus et figura sillogistica, et sic excluduntur a doctrinis fallacie que peccant contra modum et figuram. In aliis facultatibus arguitur frequenter inductive et a simili et multis aliis argumentationibus que non habent modum et figuram sillogisticam, licet possint reduci in figuram et modum.[61]

Implied in this relationship of *figura* to *modus* is a comparison of disposition to movement. "Dispositions of enunciation" as Grosseteste describes them, are common to all knowledge, therefore, are necesssary components in the knowledge-gathering process:

> Manifestum est quod dispositiones enunciationis sunt communes omni scientie tam speciali quam communi; dispositiones autem quantitates sunt communes omnibus scientiis mathematicis, quia omnis scientia mathematica circa quantitates est; et etiam dispositiones quantitatis sunt communes scientie naturali, eo quod naturalis subicit corpus quantum mobile.[62]

Music is a mathematical discipline, in which quantity in motion is the essence of its particular nature. It is no wonder that, in writing about music, there is an increase in the use of the term *modus*, in ways that are strikingly different from its use in the earlier Middle Ages. Mode, in the past, referred to a melodic structural unity. An entire piece of chant, for example, reflected, in all of its gestures, as well as in the musical material used, a characteristic mode. The piece of music—an introit or communion—therefore, could be said to be "in" a mode, although medieval theorists do not express the relationship in quite this way. "Mode" thus implied the "totality" portion of the totality/part duality.

---

multiplicatur, quoniam multis diversisque modis distribuitur et multiplicatur. Hec vero multiplicacio et variacio universorum est pulchritudo, quoniam nisi dissimiliter pulcra essent singula summe pulcra non essent universa simul. Non enim aliquod ex universis capere potuit, quod erat pulcritudinis totum, et iccirca summa pulcritudo varia participacione distributa est in singulis, ut perfecta esse posset simul in universis. Ipsa vero distributio multiplicatur optime et pulchre: optime in universis, et pulcre in singulis. The implication here is that all of the gifts of the Spirit have a common source, all form a totality within the personality, yet all, as modes, maintain their diversity and character. Each is recognizable; together they form a unified composite. We have cited this quotation above with respect to diversity; both the points of *composite* and of individual, particular *modus* are made equally strongly. Cf. Hugh of St. Victor, *Expositio in Hierarchiam celestem*, II (*PL* CLXXV, cols. 943f.).

[61] Grosseteste, *Comm. Post. Anal.*, p. 178.

[62] Grosseteste, *Comm. Post. Anal.*, p. 170.

This changes. As the result of a new Aristotelian use of *modus*, as well as new varieties of meaning in the translation of significant terms from the Greek into Latin during the early thirteenth century, the term became richer, with many new aspects of significance, but it was also a necessary term in logical process as well as in cognitive understanding. *Modus* becomes a part within composite.

Musical time-lapse could be made to reflect both the motion implied by mode, and the individual demonstrative component designated by *figura*. Accordingly, an entire rhythmic motion could be designated by separate notational signs or *figurae* on a manuscript page. Distinguishing signs together indicated a characteristic rhythmic motion. This was reinforced by an entire quadrivial understanding of *figura-modus*.[63] The terms have important significance in all of the quadrivial arts. *Figura*, in music, was a notational unit, or the smallest possible complete combination of conjunctive lines. *Mode* was understood as a rhythmic disposition, or movement, which was demonstrated by the *figures* of that particular disposition. Altogether, the modes formed a vocabulary of rhythmic dispositions accessible to the human voice, which could be used to form composites or compositions. A rhythmic motion, or mode, could be repeated many times, but it need not be. The composition constituted the totality composed of many modes, so that it formed a convincing whole, a syntactical continuity.

Again, music, in its relationship to the passing of time, and its use of materials which were concrete, yet abstract, had expressive power, as well as delectableness. It could therefore express concepts which were new, yet securely founded upon theological constructs. Rhythmic modes were distinguished, one from the other, by their motions. The "fruit" of the Holy Spirit was a composite, yet each separate mode could be identified by its action, within the personality, and without. So a musical composition was a composite containing diverse, multiple, rhythmic motions. Rhythmic modes or motions (*passiones=modi*) were parts within the totality of musical syntax.

The development, during the course of the thirteenth century, of a music notation with an ability to express *both* pitch–as had been the case for hundreds of years–*and* rhythmic motions has never been convincingly explained. Individual perspicacity on the parts, for example, of such writers

---

[63] Grosseteste, *Comm. Post. Anal.*, p. 176: Duo enim dicta nomina dupliciter dicuntur sicut hoc nomen "arithmon." Est autem rithmus sermo compositus ex certis pedibus concordantibus sibi in temporibus et plausu, sed non observat certum numerum pedum; et in hoc differt rithmus a metro, quia metrum observat certos pedes et certum numerum pedum. Arithmon igitur est sermo qui non habet rithmum et etiam qui habet rithmum, sed pravum . Ex sensu dicto satis patet littera. Sed hic oritur dubitatio qualiter dicat Aristoteles interrogationes esse geometricas et musicas, et ita de aliis scientiis...

on music as Franco of Cologne, has been advanced, but this view seems too simplistic, and, furthermore, reflective of an emerging view of the creative writer or composer—as well as the creative work itself. It is, in other words, not an explanation.[64] Music, in its motion in time, demonstrated modes of motion in its rhythmic delineation. This insight was possible only through the combination of the entire intellectual background we have set forth combined with the tradition that music demonstrated theological and intellectual constructs. But it would have been an insight immediately comprehensible to a thirteenth-century intellectual.

What, then, does the anonymous writer on music have in mind? a performance mandate, a way of understanding music in terms of more modern rhythmic values? Writing on music in the thirteenth century has, in this century, been interpreted as setting forth prescriptions for placing thirteenth-century music in rhythmic patterns, with the result, as we see in the above example, that the music is tedious in its rhythmic repetition.

Modes, however, were components within a composite. They are kinds of rhythmic motion which are abstracted from syntax for the purpose of analysis. In musical terms, they classify the varieties of rhythmic characters which can be comfortably reproduced by the human voice. Rhythmic modes are types within an analytical system, not prescriptions for performance or editorial, transcriptional practice. Cognitive tools were developed here, with applications within an art/science that was expressly understood to contain the capacity to demonstrate. Music was this art.

---

[64] The statement: *Magister Franco qui invenit in cantu mensuram figurarum* has been attributed to Johannes de Muris. This statement should be taken as evidence for a view of the composer-writer and his work, in the early fourteenth century, not as fact, that is, evidence that Franco of Cologne single-mindedly and handedly "invented" notation capable of designating rhythmic motions. The emerging view of the work and the role of the composer in the creation of work is discussed below. With respect to the interpretation of historical statement, and the ambiguity which surrounds the identity of Franco, compare the fifth edition of *Grove's Dictionary of Music and Musicians*, 9 vols (ed. Eric Blom, London, 1954), with the more recent edition of *The New Grove's Dictionary* (ed. Stanley Sadie, London, 1980). The fifth edition article (by Sylvia Townsend Warner) sets forth an eleventh and a twelfth-century Franco, both of which were "mathematicians," stating: The music which has its place in the Quadrivium of the Seven Liberal Arts was akin to mathematics, and it would not have been a very long step from squaring the circle to laying down a system of mensural notation or codifying the rules of descant.

CHAPTER FIVE

GROSSETESTE'S CONCEPT OF *FIGURA*, AND ITS APPLICATION TO MUSIC NOTATION

Psalm 118 (119) which commences: *Beati immaculati in via, Quia ambulant in lege Domini*, Blessed are the undefiled in the way, who walk in the law of the Lord, is the longest of the Psalter. The Psalm is divided into discrete sections, each one delineated by a letter or character of the Hebrew alphabet, either spelled out as in the Latin Vulgate, or with the actual sign. (Example 1: Notice that the King James English version presents both the Hebrew characters and divisions.) This chapter will discuss the medieval tradition of *figura*, showing the use Grosseteste made of it, and demonstrating how music notation exemplifies the concept in particular ways during the course of the thirteenth century.

Psalm 118, commencing with *Beati immaculati*, is a consideration of particulars together in the totality of a group; a study of plurality in contrast to the individual in Psalm 1, *Beatus vir*, "blessed is the man." Each of the sections of this psalm incisively identifies a trait or potency and links this trait to a character or a *figura*. Each section, therefore, has a certain autonomous nature and is complete. All of the characters of the Hebrew alphabet that identify the sections are particular. All are necessary, and they pass by as various and diverse figures, in ordered continuity. These outward characters delineate inner subjects. When one carefully reads this entire psalm—and without Cassiodorus' psalm commentary to point this out, one must read it several times to get this point—one discovers that each section, in fact, delineates a profound aspect of the human personality. Furthermore, similar subjects, very much like contours, are presented in varied formulation. The subjects themselves could be understood as analogies to letters, which, presented in varied formulation, resulted in words.

Writers in late antiquity and the early medieval period noticed this, and Cassiodorus, in his listing of the nine modes of the psalms (in the prologue to his *Expositio psalmorum*) speaks of the "*modo hebraei alphabeti virtute profundi*." Psalm 118 is the principal psalm in this mode. The concept of *charactere sive figure variare*, which this psalm presents and makes comprehensible, had important consequences throughout the Middle Ages.

One could describe the 118th Psalm as an *aggregate* of both conceptual and visual figures. *Figurae*, as we will see, is a term which is interchangeable with such expressions as letters, characters, virtues, signs, and designs, as geometric designs, and rhythms. It is an extraordinarily

Example 1: Psalm 118 (119)

PSALM 119

א ALEPH.

BLESSED are the [a]undefiled in the way, who walk in the law of the LORD.
2 Blessed are they that keep his testimonies, and that seek him with the whole heart.
3 [b]They also do no iniquity: they walk in his ways.
4 Thou hast commanded us to keep thy precepts diligently.
5 O that my ways were directed to keep thy statutes!
6 Then shall I not be ashamed, when I have respect unto all thy commandments.
7 I will praise thee with uprightness of heart, when I shall have learned [c]thy righteous [d]judgments.
8 I will keep thy statutes: O forsake me not utterly.

ב BETH.

9 [e]Wherewithal shall a young man cleanse his way? by taking heed thereto according to thy word.
10 With my whole heart have I sought thee: O let me not [f]wander from thy commandments.
11 [g]Thy word have I hid in mine heart, that I might not sin against thee.
12 Blessed art thou, O LORD: [h]teach me thy statutes.
13 With my lips have I declared all the judgments of thy mouth.
14 I have [i]rejoiced in the way of thy testimonies, as much as in all riches.
15 I will [j]meditate in thy precepts, and have respect unto thy ways.
16 I will [k]delight myself in thy statutes: I will not forget thy word.

ג GÎ-MEL.

17 [l]Deal bountifully with thy servant, that I may live, and keep thy word.
18 [m]Open thou mine eyes, that I may behold wondrous things out of thy law.
19 I am [n]a stranger in the earth: hide not thy commandments from me.
20 [o]My soul breaketh for the longing that it hath unto thy judgments at all times.
21 Thou hast rebuked the [p]proud that are [q]cursed, which do err from thy commandments.
22 Remove from me [r]reproach and contempt; for I have [s]kept thy testimonies.
23 [t]Princes also did sit and speak against me: but thy servant did meditate in thy statutes.
24 Thy testimonies also are [u]my delight and [v]my counsellors.

ד DA-LETH.

25 [w]My soul cleaveth unto the dust: [x]quicken thou me according to thy word.
26 I have declared my ways, and thou heardest me: [y]teach me thy statutes.
27 Make me to understand the way of thy precepts: so shall I [z]talk of thy wondrous works.
28 [a]My soul [b]melteth for heaviness: strengthen thou me according unto thy word.
29 Remove from me the way of lying: and grant me thy law graciously.
30 I have chosen the way of truth: thy judgments have I laid before me.
31 I have stuck unto thy testimonies: O LORD, [c]put me not to shame.
32 I will run the way of thy commandments, when thou shalt [d]enlarge my heart.

comprehensive concept, and although the word has lost a good deal of its pungency today, many of these connotations are still understood by the term *figure*. One characteristic of *figurae* is that they are fictive, made, or fashioned. They have sharp, incisive lines and clearly show inner, invisiblerealities. *Figurae* are usually arranged in groups, as diverse and varied figures. Diversity seems to have been especially important; one letter or character alone did not make the point that the entire Hebrew alphabet with its correspondent spectrum of human characters or virtues did. This entire psalm shows a concept of varied and diverse figures. *Figurae* are plural, not singular; they deal with literate articulation, or words, not pictures, and, especially, words that are read. Together they form an aggregate or a society. The *figurae* of letters were not separate and complete by themselves, as single letters, nor was the concept of *figura* a simple unitary concept.

It was, however, an important concept in the Middle Ages. Beginning with its use in late antiquity, this chapter will focus upon the concept of *figura*, Robert Grosseteste's interpretation of the concept, and the new possibilities for music notation which resulted directly and dramatically from a new interpretation of the concept in the early thirteenth century. The concept appears to have been both multivalent and highly influential in the Middle Ages. Cassiodorus has recourse to it on nearly every page of his commentaries on the psalms. If one were to designate the one primary concern of this great psalm commentator, who writes with such vigor, dignity, and poise, one would state his interest in identifying, describing, and elucidating the diversified *figurae* of speech: how they are named; what happens to a name when it undergoes a transformation from Greek into Latin; and what each one, in particular, signifies, describes, and delineates. *Figura* is the most common Latin translation of the Greek *schema*, and Cassiodorus uses the two interchangeably.

One of Cassiodorus' *schemata* was character, the Greek *characterismos*, which informed, as well as described, either something that was absent, or a person who was visible only to the spiritual inner eye: "Quod schema dicitur characterismos, id est informatio vel descriptio, quae sive rem absentem sive personam spiritalibus oculis subministrat."[1]

The Greek *schema* was received into the Latin language during the Middle Ages through the linguistic interpretations of *figura*, *character*, *rhythmus*, *numerus*, *littera*, and *mensura*. The concept of *figurae* also appears in the context described as *ambulam in latitudine*—walking in a straight line, so to speak—thus presenting the concept of particular figures in a context. All of these Latin equivalents show facets of the significances of the word *schema*.

---

[1] Cassiodorus, *Expositio psalmorum* 1.183 (ed. M. Adriaen, *Corpus Christianorum Series Latina* XCVII, Turnhout, 1958).

For all of them plurality or diversity is essential to an understanding of what they mean. Cassiodorus' extensive discussion of figures discloses the following traits they all have in common: his "varied figures" are descriptive, therefore, show,[2] they demonstrate, they occur in an orderly fashion within a definite process,[3] they are linear—hence delineate—and they are constructed. Cassiodorus uses the example of the cross for all of these capacities of *figurae*.[4] Finally, *figurae* present a "face." It is interesting that Cassiodorus' medieval reading audience would have received a reinforcement of all of these traits in Chalcidius' commentary on Plato's *Timaeus*, since the same attributes of varied *figurae* are presented there.[5]

Cassiodorus, in describing his *figurae*, uses a language that deals with the visual and with visible things, lines, and seen descriptions. But this is a visuality of the "inner eye," as he himself states. His figures are plain, but they are not absolute seen realities. His *figurae* are verbal entities, as the *characterismos*, *epitome*, and so forth; and there are several hundred of them. (They can be seen at a glance in the *Corpus christianorum* edition of the psalm commentaries because they are designated in the margins with *SCHE*.) Cassiodorus' varied *figurae* are delineated in order to clarify the meanings of written texts. They are components in a process of *reading*. This is clarified by his treatment of Psalm 118.

Cassiodorus' exposition of the 118th psalm extensively explains a primarily verbal process of construction as a catalyst to imaginative activity. This process depends upon the written word. The letter, or *figura*, excites a progression of events; but, on the other hand, the letter is also a vestige of thought, left behind after the thought has taken place. His preoccupation with literacy is exemplified in three ways: first, he compares an abstraction such as "an inchoate undifferentiated mass" in which all of the

---

[2] Cassiodorus, *Expositio*, 1.220.1: Quoniam tituli verba iam nota sunt, et psalmus iste Hebraeorum primus alphabeto descriptus est, de eius magis virtute dicendum est. Per totum igitur librum, duo istorum genera sunt psalmorum: unum quod integrum alphabetum continere monstratur...

[3] Cassiodorus, *Expositio*, 1.248:1. Est enim totus psalmus Spiritus sancti laude plenissimus et per varias allusiones praeconia eius maiestatis exsolvens. Hoc est quod oratores dicunt demonstrativum genus, quando per huiusmodi descriptionem ostenditur aliquis atque cognoscitur. Sed quid de illo a quoquam congrue poterat dici, nisi quod de se ipse dignatur effari?

[4] Cassiodorus, *Expositio* 11.837.4: Merito ergo talis calculus totius redemptionis nostrae continet formam, qui per obliquas lineas charactere suo sanctae crucis imitatur figuram et in digitis decori circuli rotunditate concluditur.

[5] Cf. *Timaeus a Calcidio translatus commentarioque instructus*, ed. J. H. Waszink (*Plato latinus*, ed. Raymundus Klibansky, IV [London, Leiden, 1975]). Chalcidius' presentation of *figurae* includes the following attributes. They are plain (p. 61); they demonstrate (p. 62), they are composed of lines (p. 69, 88); they have properties or forms (p. 305); and they are composed or fictive.

moisture has been pressed out—like resin—to the mutation of a vowel sound when *a* in *amicus* is changed to *i* in *inimicus*.[6]

In this example Cassiodorus explains material property with *litterae*. How convinced he seems to be by his explanation. How intimate is his involvement with the single component parts of a language. How sensitive he is to the inner natures of the letters he mentions. One notices that Cassiodorus plainly states the word "eye" is not to be taken in a customary sense, but refers to the inner intuitive eye of faith.[7] Cassiodorus also makes a point of stating that form is generated internally, not externally exposed.[8]

In all three cases, meditation enables one to grasp what has been written; to consider and to shape thoughts in order that counsel—another abstraction—may be formed in the unseen interior space within the human personality. Cassiodorus actually makes prodigious demands upon the imaginative capability. But one has the feeling that he has no doubt that what he requires is possible through patient consideration. This leads us to a final point, that Cassiodorus is not dealing with instantaneous recognition but with a progressive order, eventually leading to truth. He states that the process of acquiring truth has a stepwise ascending order. Hence, it is completely different from pride which is, to translate his expression, "excitedly thrown out and is not truthful." Truth, in Cassiodorus' opinion, requires time. He contrasts "*Et vide quemamodum veritatis ordinem servat*" with "*Non est hic iactantia superba, sed veritas.*"[9]

Cassiodorus delivers this concept of a step-by-step *ascent* to truth frequently in his psalm commentaries. *Figurae*, he writes, are vestiges of actions, parts or the steps of the procedure, that leads to a goal: "*Pedes* autem *meos*, significat mentis assensum, quae nos quodam vestigio ducit..."[10] It is of interest in this context to note that, throughout the Middle Ages, the ascending sign in music notation was the *pes*. We will return to connections between a concept of *figura* and music notation.

---

[6] Cassiodorus, *Expositio*, 11.1087.70:...quam superius *multiplicatam* supra se fuisse testatus est, vult intellegi conduratam, quae more lactis in crassiorem substantiam fuerat impia deliberatione constricta. Lac dictum est a liquore, quod de interna substantia naturali potius liquore decurrat; *a* enim in *i* convertitur, ut *a*micus, *i*nimicus, et his similia.

[7] Cassiodorus, *Expositio*, 11.1093.82: *Oculos* aliquid *dicere*; non est communis aut usitata locutio; sed istum compositionis modum scripturae divinae necesse est ut proprium esse fateamur...Unde evidenter agnoscimus iustos viros, etsi carnalibus oculis adventum Domini non viderint, fidei lumine ab eis semper intuitum; sicut et ipse Dominus discipulis suis in evangelio dicit: *Abraham cupivit videre diem meum, vidit, et gavisus est.*

[8] Cassiodorus, *Expositio*, 11.1096.92:...ut intellegamus quantum nobis praestet *meditatio legis*, quae potuit a tam ingentibus liberare periculis. *Meditatio* quippe *legis* est illa quae praecepit vel cogitare vel facere; ut interiore quasi consiliario formatus, saevientia tormenta superare possit intrepidus.

[9] Cassiodorus, *Expositio*, 11.1100-1101.

[10] Cassiodorus, *Expositio*, 11.1101.101.

Cassiodorus' *figurae* excited. They provided an impetus to thought for the reader. *Figurae* were also vestiges from the thought of the writer. This is an important duality and the psalm commentator emphasizes it in many contexts. One also notices Cassiodorus' faith in the exemplary finality of the letter. He has no difficulty at all in comparing materials with vowel changes as if grammatical mutation were the final court of authority over the nature of reality.[11]

By their incisiveness, *figurae* released an energy, which is the most vivid medieval explanation of what *figurae* do and are. Cassiodorus explains that *figurae* release energy so that a vestige remains behind in the imagination, as he writes: the "character" of an absent thing, or an unseen, no longer visible, person remains.

One looks in vain for the term *symbolum*. Cassiodorus does not use the term *symbolum*; but the concept of an aggregate of *figurae*, all separate and particular, yet united by a mysterious bond into a whole, is definitely an important, carefully examined concept in his writing. He discusses the circle-crown, the cross, and the quadrate as totalities composed of multiple internal portions. In his finale to his entire commentary on the psalms, Cassiodorus concludes with a description of a crown formed by the letters of the Hebrew alphabet, sung, one after the other.[12]

This aggregate of Hebrew letters, artificially placed in a circle, was like the stars in the heavens, or the fish of the sea which the apostles hauled out, one by one. Therefore, writes Cassiodorus, numbers or names—or the present example, a crown—demonstrate by the particulars they contain. His crown is a simple verbally-construed image, but a great deal of knowledge is required before the meaning of this crown finally becomes apparent to the reader.

---

[11] Concerning the authority of the letter, cf Cassiodorus, *Expositio*, 11.1126.152:...in exemplum...praefiguratione suscepta sunt. *Cognovit* etiam *ab initio*, quando Abraham filium suum in mysterium Domini Salvatoris obtulit immolandum et his similia, quae sacrarum litterarum lectionibus continentur. Haec sine dubio in *aeternum fundata sunt*, quoniam veritatis ipsius testimonio comprobantur.

[12] Cassiodorus, *Expositio*, 11.1138-9: *Conclusio psalmi*. Amplectendus suaviter omnino psalmus, qui tali confessione finitus est, prolixitate magnus, admiratione profunditatis oceanus, excellentium rerum amoenitate paradisus, quem virtutum floribus ornatum, per alphabetum Hebraeorum sanctorum omnium immarcescibilis corona cantavit. Et ut similitudines aliquas de rebus naturalibus exquiramus, sic grues litteris graecis volatus suos depingunt; et tanta huius rei vis est, ut quamvis aves apices nesciant, tamen eos naturali institutione componant. Vidimus igitur eius sententias quasi stellas clarissimas in caelo altissimo collocatas; vidimus amplissimum mare illis piscibus plenum, quos apostolorum retia Domino praecipiente traxerunt...Conveniebat enim ut Ecclesiam de toto orbe collectam et in Domini laudibus commoratam, graduum cantica sequerentur; quatenus illa similitudo indicaretur...Iota vero et eta (sicut apud Graecos scribitur) octavi decimi calculi obtinet quantitatem. Sic iste numerus et coronae praemium et sancti nominis decus in se continere monstratur.

Cassiodorus' crown today would be named a symbol, but he does not use this term for three reasons. First, *symbolum* had a specific significance in the Middle Ages. In the context of the use that occurred most frequently, *symbolum* referred to the Apostle's Creed and the name does not appear to have been transferred to other examples of the same intellectual process. Secondly, Cassiodorus, in his naming, identifying, dividing and categorizing, seems to have been completely preoccupied with a concept of particularity, or single elements, rather than in either their connections with each other, or how they, together, could be perceived as a composite. Third, Cassidorus is interested in reading.[13]

This commentator's preoccupation with the written word, with letters, and with verbal descriptions is especially significant in light of the fact that Psalm 118 and Cassiodorus' commentary on it have to do with what one holds most dear, what one desires (*delectatio*), cultivates (*disciplina*), knows (*scientia*), the goals one places before oneself, and the question of an ability to come to decisions or the will (*consilia*). Joy, deliciousness, sweetness, response, culpability, responsibility, and insanity are all treated in Cassiodorus' serene and deliberate style. His commentary is full of insights into the human personality: pride, he writes, constricts, restricts, vanquishes, and suffocates.[14] One actually draws vitality from resisting pride.[15]

Cassiodorus connects intimacy and unseen private realities with *litterae*, with numbers, incisive lines, and *figurae*. He describes profound qualities of the human spirit, created by God, by using various Hebrew characters.

---

[13] Cf. two additional passages, one on the *corona*: Cassiodorus, *Expositio*, 1.183.4:...*Corona* enim non improbe circumeuntium discipulorum videtur significare conventum quia ipsum docentem desiderantium apostolorum circuitus ambiebat. Haec erat corona capitis, hoc regale diadema, quod non ornaret impositum sed de Christo Domino potius ornaretur. In hac enim corona et totius mundi circulum merito poterimus advertere; in quo generalis significatur Ecclesia. Quod schema dicitur characterismos, id est informatio vel descriptio, quae sive rem absentem sive personam spiritalibus oculis subministrat. Hoc et in laude et in vituperatione fieri solet; another on the *quadrate*: Cassiodorus, *Expositio*, 11.837.4: *In decachordo psalterio, cum cantico et cithara. Decachordum psalterium* decem praecepta legis significare manifestum est, quia ipsa chordae sunt; quas si bonorum actuum qualitate tangamus, salutare melos efficiunt et ad caelorum regna perducunt. Scire autem debemus cur iste numerus tantae rei videatur adiunctus. Ipse est quem Pythagorici *τετραδαξάτην* vocant, id est quaternitatem divinam, quoniam breviter comprehendit quod per infinitas summas noscitur posse dilatari. See also Gerhart B. Ladner, "St. Gregory of Nyssa and St. Augustine on the Symbolism of the Cross," *Late Classical and Medieval Studies in Honor of Albert Mathias Friend, Jr.* (Princeton, 1955), p. 88ff.

[14] Cassiodorus, *Expositio*, 11.1106.110: Fuit enim laqueus diaboli armatus triginta argenteis, cum Iudam cepit atque in interitum suffocavit; ipse Saulem vinxit zelo superbiae; ipse Cain livore fratris astrinxit, et his similia quae in huius saeculi longissimam vitam diabolica iugiter grassatur insania. In hac enim mundi silva tot laqueos invenis, quot vitia contueris. Sed collegio isti sancto nihil terrenum praevalere potuit, qui se caelesti conversatione tractavit...

[15] Cassiodorus, *Expositio*, 11.1107.112.

Furthermore, these *figurae* were perfect intellectual constructs because they had a direct relationship to life. Psalm 118 deals with what it means to be a person.

There is every reason to believe that Cassiodorus' psalm commentaries were extremely influential in the Middle Ages. Manuscript transmission shows this without a doubt; but Latin writings both show the influence of his ideas and can better be understood against the background of his writings. His influence has not been acknowledged sufficiently, and he has not been read as thoroughly and sympathetically as his immense medieval influence warrants. One of his most important ideas is significant for an interpretation of the place of music. He writes that music is an example of spiritual realities.[16]

What became of Cassiodorus' concept of *figurae* during the course of the Middle Ages? Influential writers such as Alan of Lille and Thomas Aquinas certainly knew Psalm 118, as well as Cassiodorus' commentaries on it. Judging by the frequency with which they use the term and the manner with which it is used, it is clear that *figura* was highly significant to them both. They also emphasize plural *figurae*. Varied and diverse *figurae*, as a topos, occur in discussions, either of the apostolic *symbolum*, which, according to Alan of Lille, could be likened to a catch of various and diverse fish, or by Aquinas in his discussion of the relationship *in symbolis* in his commentary on Aristotle's *Metaphysica*.

Alan of Lille wrote a commentary on the *symbolum*, but he also wrote a commentary on a musical sequence text for the Archangel Michael. His text on a phrase, *theologa categorizant symbola* is of particular use for the differentiation we are making between *figura*, *figurae variarae*, and *symbolum*. His commentary on this phrase reads: "A *symbolum*, properly understood, is a society or a *collatio* of those living together. *Symbolum* is to say '*syn*', which is *simul*, and '*bolos*' which is portion."[17] One, therefore,

---

[16] Cassiodorus, *Expositio*, 11.881: *Conclusio psalmi*. Quid est hoc quod instrumenta musica frequenter posita reperimus in psalmis, quae non tam videntur mulcere aurium sensum, sed provocare potius cordis auditum? Sed quoniam ille sonus et modulatio tibiarum a sacris mysteriis nostra nihilominus aetate discessit, restat ut intelligentiam huius rei spiritaliter perquirere debeamus. Musica est disciplina quae rerum sibi congruentium, id est sonorum differentias et convenientias perscrutatur. Haec merito ponitur ad rerum spiritalium similitudines explicandas; quoniam concentus eius virtute inconvenientiae subsistit. Nam sive quando psalmodiam dicimus, sive quando mandatis Domini operam navanter impendimus, dulcissimae harmoniae gratia temperamur. Et si causas huius rei alta deliberatione perpendas, quaelibet creatura rationabilis, si auctoris sui vivat imperio, ab hac convenientia non probatur excepta. Merito ergo incessanter praecipimur Domini psallere, in psalmo citharizare, in cithara psallere, iubilare in tubis ductilibus et corneis; ut dubium non sit haec instrumenta dulcisona probabilium actuum nobis indicare concordiam.

[17] Alain de Lille, *Textes inédits avec une introduction sur sa vie et ses oeuvres*, ed. Marie-Thérèse d'Alverny (Paris, 1965), pp. 200f.: *...theologa cathegorizant symbola*. Symbolum proprie dicitur aliquorum convivantium collatio, in qua unusquisque suam ponit portionem expense. Unde symbolum dicitur a "syn," quod est simul, et "bolos," quod est portio, quia in

designates the Credo a *symbolum* because it contains diverse portions or articles of the Christian faith. Alan of Lille thought this definition important enough to quote it at least five times.[18] His definition, as well as the comments that surround it, show that his concept of *symbolum* is specific, namely the apostolic creed, and that diverse portions, or articulations, are the most characteristic feature of the *symbolum*, which is a literary event, composed of *litterae* or *figurae*. Furthermore, each letter, or *figura*, shows interior property or sense. The totality generated by varied figures, comprising words, together within one overriding umbrella concept, is multiplex in nature. It is obvious that Alan's *symbolum* is a literary composite; and furthermore, it is next to impossible to envision one single, visible entity to represent the Credo.[19]

Furthermore, a *symbolum* for Alan of Lille was perceived in the course of time and by reading. A theophany, however, was something else. In this commentary on a sequence text dealing with angels generally, and Michael the Archangel in particular, Alan writes extensively on the character of theophanies. A theophany, according to this writer, is the kind of vision a certain order of angels has because these angels actually see God. There is also the implication that they, because of their proximity to God, experience God. Their vision is immediate, instantaneous, singular, and spontaneous in operation. Alan compares the singular quality of a theophany to a crowd infused with a single spirit.[20]

Finally, Alan differentiates between physics, which studies diverse and varied motions, sources of motion, and theophanies. This difference lies in the use of the senses and the order within a cognitive process in which the sensitive moment, so to speak, occurs. To paraphrase this passage: manifest is the difference between physics and theophanies. The physical descends

---

expensa unusquisque suam ponit portionem. Translative autem cathalogus articulorum christiane fidei, ut "Quicumque vult" et "Credo in Deum" symbolum nuncupatur, quia in eo diverse portiones sive articuli christiane fidei continentur. See also Gerhart B. Ladner, "Medieval and Modern Symbolism: A Comparison," *Speculum* 54 (1979), pp. 223-256.

[18] Alain de Lille, *Distinctiones*, *symbolum*: signum, unde Dionysius in Hierarchia similudines quae transferunter a terrenis ad caelestia vocat symbolicas...dicitur collatio, in qua simul plures portiones ad convivandum ponuntur; et dicitur symbolum a "sin," quod est simul, et bolus, boli, quod est portio, quoniam unusquisque ponit ibi portionem suam...dicitur sermo in quo continentur diversi fidei articuli (cf. d'Alverny, *Textes*, n.p. 201).

[19] Alain de Lille, *Textes*, p. 201: Vel symbola possunt dici enigmatice locutiones, que aliud in superficie littere pretendunt, interius autem altiorem sensum intelligentie custodiunt.

[20] Alain de Lille, *Textes*, p. 203: "caractere theophanie:" "Ordo angelicus" est, ut testatur Iohannes Scotus super Ierarchiam "caractere theophanie simplicis et non ymaginerie et reciproce uniformis spirituum multitudo."...Et quia non solum angelorum, sed etiam hominum multitudo esse potest, ideo adiungitur: "spirituum." Sed et quia angelorum potest esse pluralitas in modo intuendi Deum non conveniens, sequitur: "uniformis caractere theophanie," id est conveniens in uno modo speculandi Deum. Caracter enim idem est quod modus vel figura; "theos," Deus, "phanes" visio interpretatur. In quo ergo sit uniformis ordo angelicus, determinatur, cum adnectitur: "caractere theophanie," id est modo vel figura divine visionis.

from the intellect to the senses. Physical qualities such as heat, cold, pepper, and so on are preconceived as articulated categories first in the intellect. Only later, after they have been sorted out intellectually, are they actually experienced. On the other hand, a theophany begins with the sense of sight, then tends toward the intellect. The sense impression is immediate, instantaneous, and complete as an impression. It is only later identified by the intellect.[21]

Building upon and interpreting Pseudo-Dionysius's explication of the angelic hierarchies, as well as Hugh of St. Victor's commentary on the same work, Alan of Lille's theophany—an instantaneous vision of God, the unseen—is a simple and reciprocal manifestation. It is the superior vision because it is the kind of visuality possessed by the highest order of angels. Since they are in the presence of God, they actually *see* and experience God. They are the seraphim and their immediacy is granted to them because of their capacity to love.[22]

We should retrace Alan's thought process, which, although not especially complicated, is an unaccustomed line of inquiry, as it was for his own contemporary audience. Alan of Lille is obviously interested in hierarchies of angels, a subject which, of course, had a long traditional past. But the writer brings up an old subject with new vigor, adding a new emphasis, that of angelic beings within a discussion of cognition. This twelfth-century writer is pointing out a difference between "varied figures," or figures in all of their diversities of operations, outward appearances, and gestures, and the single complete rush of intuitive, participatory, and immediate visual experience, that is, the vision of God.[23]

Alan of Lille is patiently explaining an important difference in process. What occurs in such a vision of God—a theophany—is exactly the reverse

---

[21] Chalcidius' commentary on Plato's *Timaeus*, ed. p. 269f. Sight, in his chapter *De visu*, is the most important sense faculty because it enables us to establish and understand an abstraction such as recurrence.

[22] Alain de Lille, *Textes*, p. 206: Hanc reciprocam manifestationem, ut superius dictum est, habent angeli, quia non solummodo in extrinsecis creaturis, sed cum Deo vident Deum. Although this particular aspect—namely, that certain kinds of knowledge are made accessible by and through love—deserves a separate study, it was a topic of much interest to Robert Grosseteste. He wrote a yet unedited commentary on Pseudo-Dionysius, *De caelesti hierarchia* (cf. *De divinis nominibus* in: *Dionysiana: le text latin des oeuvres du ps. Ar<a>eopagite*, I, ed. P. Chevallier [Paris, 1927]), and, in several contexts, advanced the point of view that *aspectus* was crucially influenced by *affectus*, or, in other words, the mind's range of vision cannot extend further than its range of love (as, for example, in *De artibus liberalibus*, ed. p. 1). See especially James McEvoy, *The Philosophy of Robert Grosseteste* (Oxford, 1983), p. 258 (cf. as well, pp. 107, 135, 138), and Richard W. Southern's introduction to *Aspectus et Affectus. Essays and Editions in Grosseteste and Medieval Intellectual Life in Honor of Richard C. Dales*, ed. Gunar Freibergs (New York, 1991), pp. 3-14.

[23] Cf. Alain de Lille, *Textes*, p. 216; p. 228: the treatises are important for other reasons too, such as an explication of "hierarchy," or "ordo," and how offices are informed as separate entities, one from another.

of the cognitive process required for the perception and interpretation of the varied and diverse figures of the created world. The character—simple and singular—of a theophany strikes the eye, excites the mind, and recognition follows instantaneously so that one is immediately aware of a composite. In contrast, the comprehension of varied, created figures follows within the course of reflection. They are what Alan names *agalma*. Thought proceeds first, experience follows.

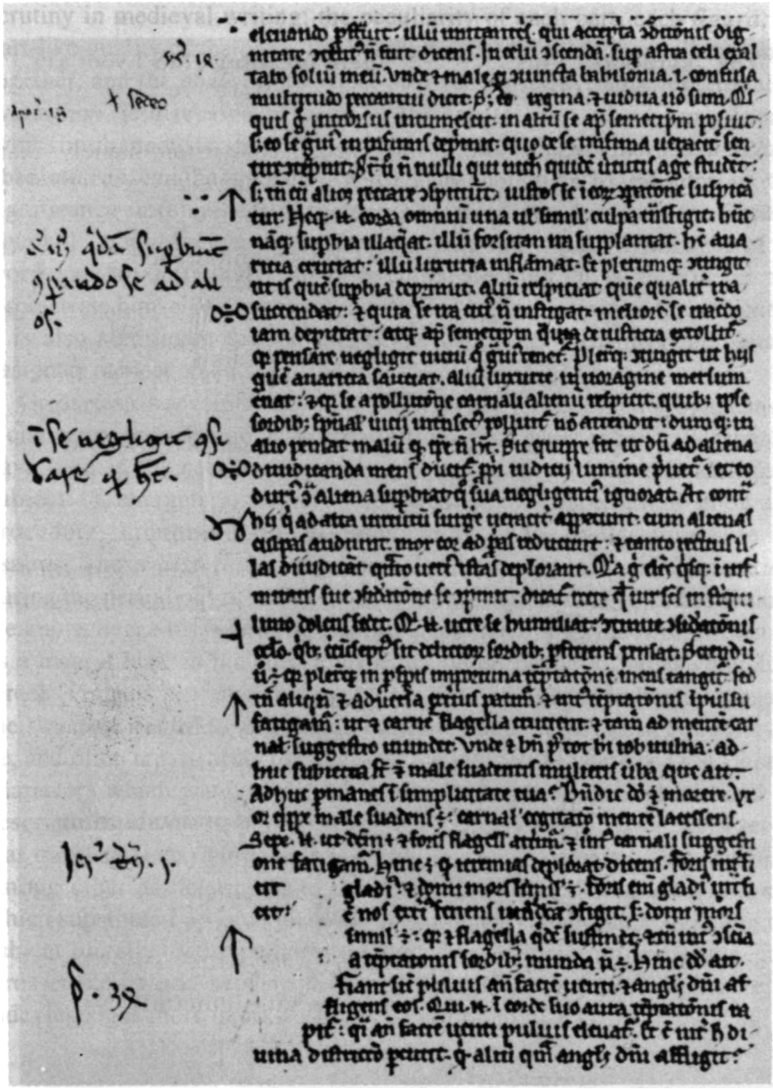
What does this imply? First, one general conclusion, namely, that a recognizable, more contemporary concept of the "symbolic" or "symbol" did not proceed directly from the medieval *symbolum*, but, rather, it was attached to the word much later, with a break between its medieval use and its appearance in the seventeenth century. The "symbolic" concept is the "theophany," perceived by sense first, intellected later. It is quite separate and distinct from the procedures employed in the *artes*, and in scrutinization generally. Alan, quoting Johannes Scotus Eriugena, emphasizes this category of the simple and reciprocal manifestation. It is reciprocal because the viewer actually *sees* the seen. When one compares *symbolum* with *theophania*, as presented in this commentary, one receives the impression that a *theophania* was the more immediate, rewarding, and apprehensible of the two. Each had an entirely different function. A *symbolum* was a verbal system with interlocking yet distinct tenets, the *theophania* immediately, spontaneously produced recognition or an effect. It is the latter that could be applied in new ways.[24]

Robert Grosseteste's indexing *figurae* show just such an application. (Compare Example 2: indexing *figurae*, with Example 3, an explanation of the *figurae*.) These *figurae*, obviously, are not to be equated with theophanies, yet the contrast and opposition between literate process and instantaneous recognition is made, in which Grosseteste substitutes one instantaneously-perceived image for a subject, a concentrated intellectual material, and a multivalent content. Richard Southern and others, such as R. W. Hunt, have identified these *figurae* or *distinctiones* as symbols. However, the use of the word *symbolum* for these signs obscures an issue, and, furthermore, Grosseteste himself did not refer to them by this term.*Symbolic*, *symbol* as expressions are used so frequently today that they

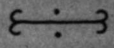
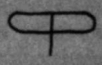
---

[24] Aquinas' *figurae* are fully literate; his concept, *symbolum*, or the relationship *in symbolis*, is explained as a society of small, petty rules that together form a body of law: Imaginantur autem quidam, quod sicut in symbolis conviviorum non pertinet ad liberalitatem, quod debeant etiam minima computari in ratiocinio, ita etiam sit quaedam importunitas et illiberalitas, si homo velit circa cognitionem veritatis etiam minima discutere. These *figurae in symbolis* like Cassiodorus', require time to be able to discern the relationships set forth by the text. See Thomas' commentary on the Moerbeke translation of Aristotle's *Metaphysica*, ed. M.-R. Cathala (Rome, 1964), p. 93.

Example 2: Oxford, Bodleian Library, MS Bodley 198, fol. 120v



Example 3: (Cf. R. W. Hunt, "Manuscripts containing the indexing symbols of Robert Grosseteste," *Bodleian Library Record*, 4, pp. 241-255)

The symbols (MS Bodl. 198, f. 45^{v})	**Their meaning** (MS Lyons 414, ff. 17^{r}-19^{r})
	on prayer
	on God's omnipotence
	on God's wisdom
	on the Creation of the World
	on sleep and dreams
	on imagination
	on the dignity of Man
	on reason and understanding
	on faith
	on the divine humanity
	on the road to heaven

have become almost meaningless. In the Middle Ages however, *symbolum*—as we have seen—was a verbal aggregate composed of many distinct and individual parts. Each aspect of this construct falls under scrutiny in medieval writing: the peculiarity of each part, each *figura*, the part-like quality of the parts, the bonding agent bringing them all rationally together, and the concept of variety or diversity itself. The overall totality, *symbolum*, is discussed in terms of the separateness of the components; sym=simultaneously, bolum=portions or particulars. This usage is now obsolete, as can be gauged by the fact that there is no hint of this significance in references to the apostle's creed. To designate the Credo a "symbol" would be meaningless today, since the visual significance of the word *symbol* has totally taken over its meaning. It is significant that Grosseteste himself does not use symbol but rather *distinctiones* and *figurae*. It is also significant that he uses signs which are clear and complete to designate subject areas. He is the first to do so.[25]

Grosseteste's revolutionary idea of indicating subject matter by means of a character, thus distinguishing parts from each other, is exactly what we have seen in the sectional divisions of Psalm 118 and the relationship of subject to characters. Robert Grosseteste, no doubt, came upon this procedure through his study, commenting upon, and lecturing on the psalms. These *distinctiones*, as he calls them, appear in his annotations during the period of his psalm lectures in theology at Oxford as he, as far as we know, began his official academic career, and during the period when he, as a man at least in his late fifties if not older, began to intensively study Greek. Perhaps it seems obvious today, but one needed to have a grasp of the structure of Greek substantives, of how multivalent Greek concepts can be, and often are, in order to have seen the relationship between the Hebrew characters which were, of course, written out in the Latin Psalter, and the descriptions of character in the text. The Greek *schema*, as one will recall, was translated into *figura*, *character*, *littera*, but also diagram, and *rhythmus*, among other associations and nuances of meaning. These *distinctiones*, which substituted a visual diagram for a subject, rather than explaining this subject literally, were, perhaps, the most immediately influential aspect of Grosseteste's work. Modern historians have also tended to emphasize the indexing signs more than Grosseteste's writing itself.[26]

---

[25] Gilbert of Poitiers, for example, in his *Sentences*, similarly delineates subject areas, but does not use visual images; see Theresa Gross-Diaz, *The Psalm Commentaries of Gilbert of Poitiers: From Lectio divina to the Lecture Room* (Ph.D. Dissertation, Northwestern University, 1992), pp. 46-115, especially pp. 90-105, 109-115.

[26] Cf. R.W. Southern's discussion of the *distinctiones* and their influence in *Robert Grosseteste*, p. 188f, as well as Mary A. and Richard H. Rouse, "The Development of Research Tools in the Thirteenth Century," in: *Authentic Witnesses: Approaches to Medieval Texts in Manuscripts* (Notre Dame, Indiana, 1991), pp. 232f.

Grosseteste's *distinctiones* have been brought into this discussion of thirteenth-century explications of *figura/figurae variarae* because they give a clear, complete, visual statement for the eye, and they were revolutionary in the first generation of the thirteenth century. It is not necessary to imagine these *figurae*, or to bring together many component parts into an imaginary society, as it is with the medieval *symbolum*, a literate composite of *figurae*. Cassiodorus' three visual *figurae*, the circle-crown, the cross, and the quadrate are explained verbally. The contrast is clear: Grosseteste's *figurae* extrapolate an outline in order to recall instantly, and to retain a subject in his memory. In a way, they geometricize substance. The crucial difference is that Grosseteste actually *draws* his *figurae*. They are clear, simple, and complete marginal statements. Grosseteste is also conscious of exactly what he thinks may happen to them in the imaginative process. Both he and Alan of Lille are concerned with the process of instantaneous recognition.[27]

It is of interest for our inquiry that simple, significant, music notational *figurae*, bearing rhythmic connotation emerge in descriptions at this time. During this incisive period of the mid-thirteenth century, there is a new representation of musical reality that is characteristic, incisive, clear, simple, and complete. New developments for spontaneous representation influence music, and, conversely, music, as we have seen, exemplifies this new concept of symbolic representation. Both the concepts of *figurae variarae* and simple figures are discussed in writings concerning music. The anonymous English writer on music, for example, discusses the concept of *figura* in the following terms: Figures occur in an ordered context, they demonstrate,[28] they designate material, which leads to cognition;[29] figures make connections and distinctions known,[30] and, finally, figures simply signify sound, hence the notational terminological term for a single tone, *simplex*.[31]

The impact of this intellectual preoccupation with the simple, complete, and significant was increasingly apparent visually in musical notation. Examples 4 and 5: compare music notational *varied and diverse figures* with

---

[27] Cf. Southern, *Grosseteste*, p. 40f cf. p. 216f.

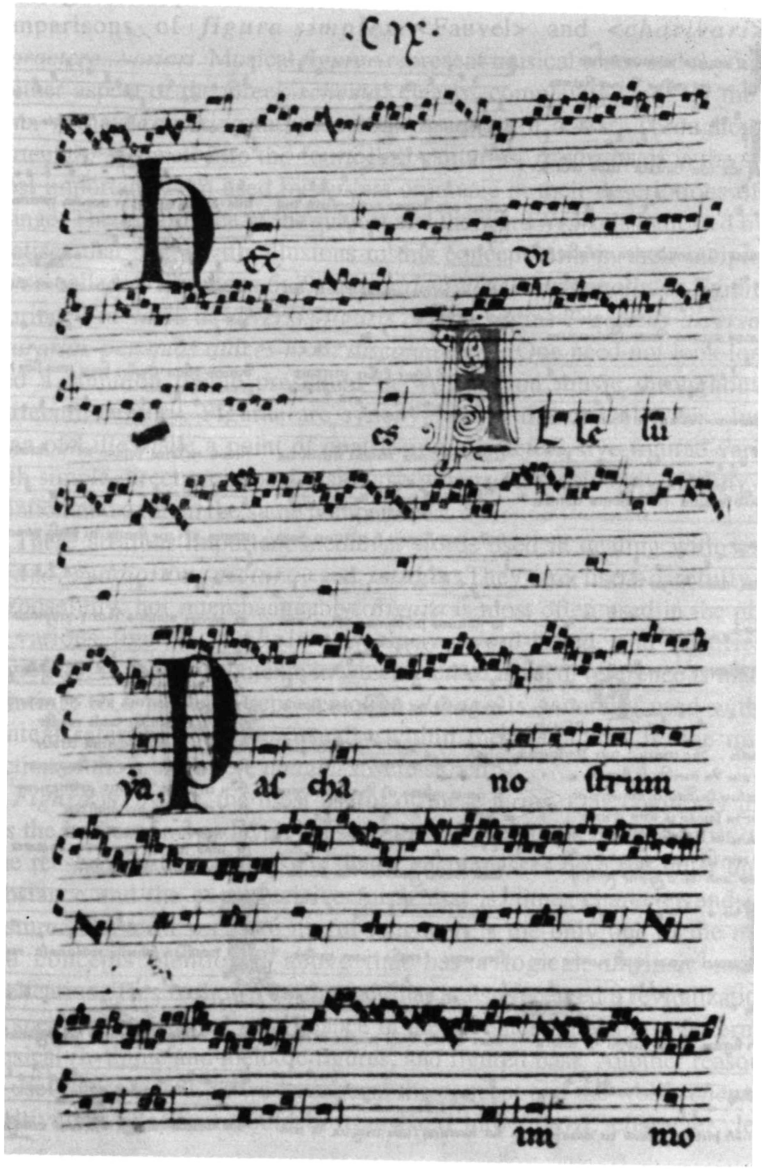
[28] *Anonymus IV*, ed. p. 23: Ordinatio principii primi aliorum modorum est ordinatio punctorum vel sonorum melorum, quae sine pausatione sumpta sub certo ordine sonorum iunctorum figuris troporum plenius iungantur.

[29] *Anonymus IV*, ed. pp. 26ff:...cum duobus cum proprietate et imperfectione punctorum figurae materialis...Et sic possumus intelligere...Et sic ulterius procedit per undecim, sed de proprietate et conditione materiali figurarum omnium supradictarum et postposit<a>rum. Cognitio e<a>rundem est habenda...

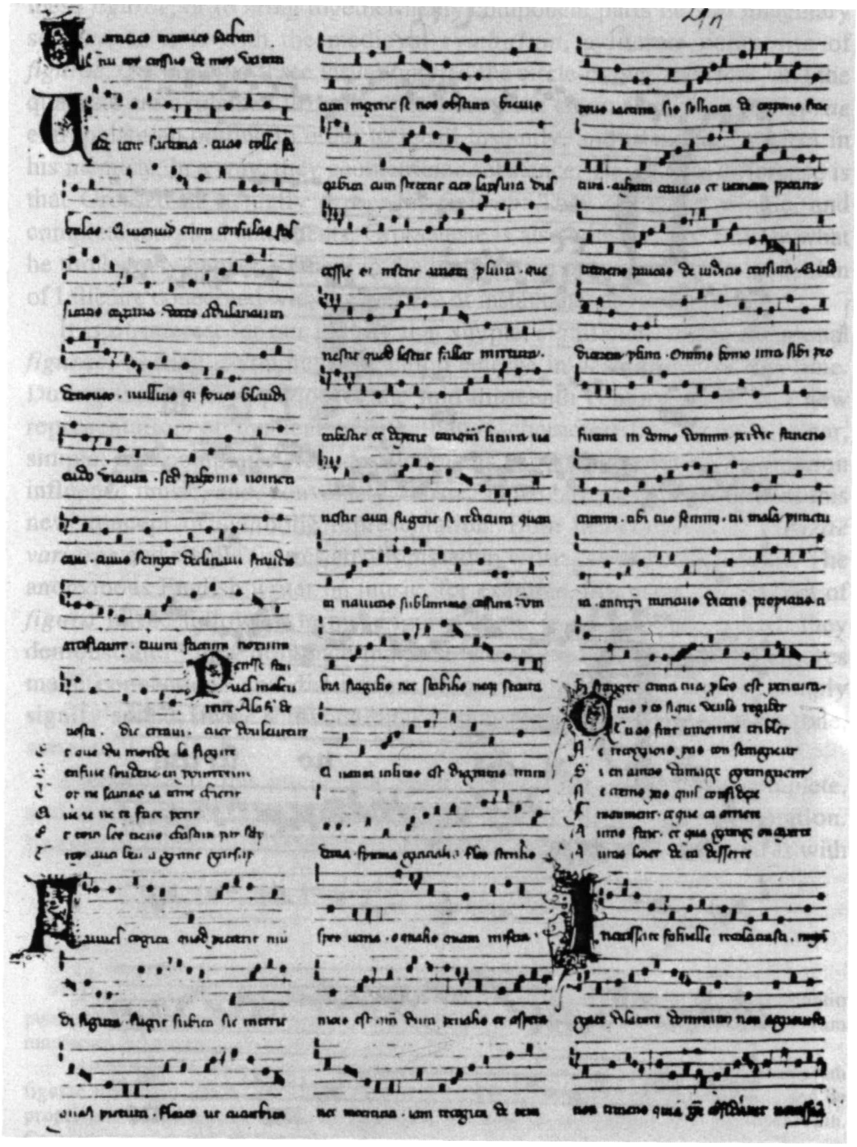
[30] *Anonymus IV*, ed. p. 36: Omnibus computatis quae possunt computari prout numerus, pes, figura, coniunctio disiunctioque sufficienter conveniant.

[31] *Anonymus IV*, ed. pp. 40f:...apud aliquos figurae vocantur, quare nota figura potest dici; apud aliquos simplices soni dicuntur, et sic materiali signo pro formali intelligitur etc.

Example 4: (Florence, Biblioteca Medico-Laurenziana, Pluteo 29, 1: f. 109n; contrast between single note, groups, or ligatures of notes)



Example 5: (Early fourteenth-century *Roman de Fauvel*, contrast between single note, *simplex*, and, in following example, *figurae variarae*)



the simplex (one clear, single figure). Example 5: The fourteenth-century century*Roman de Fauvel*, in which the concept of *figura simplex* is contrasted with *figurae variarae* in three manners: music, text, and with line drawings. Examples 6 and 7: *Roman de Fauvel*, show the parallel comparisons of *figura simplex* <Fauvel> and <*charivari*> or *charactere...variari*. Musical *figurae* represent musical tones and rhythm (as another aspect of the Greek *schema*) clearly, completely, and, for the first time, without requiring the accentual direction of a text. Throughout the thirteenth, and well into the fourteenth centuries, *figura* itself is the single most important word used by writers on music in their descriptions of this change. The importance of the subject and the word *figura* is indicated by the treatises that begin with allusions to this concept/term in their incipits, as the so-called Anonymous 6: *Tractatus de figuris sive de notis*, or Egidius of Murino: *Tractatus de diversis figuris,* which begins *Tractatus diversarum figurarum per quas dulces modi discantantur.*[32] One need not look long to find a common theme presented in writings on music throughout the thirteenth century. Figurae are synonymous with musical notes. Just as Alan of Lille made a point of contrasting charactere sive figurae variarae with simple direct reciprocal vision, so writers on music only slightly later mention and explain the same comparison.

There are four important medieval words used in dealing with vision: *figura*, *symbolum*, *pictura*, and *imago*. They are used carefully and purposefully, not interchangeably. *Figura* is most often used in the plural, as various figures; *symbolum* is always word-based, and signifies an aggregate. In the few contexts in which *pictura* is used, reference is made to painting, to a pictorial representation. *Imago* is generally used within a context referring to place, usually within the brain, that is, the middle section of the brain where *imagines* were stored.

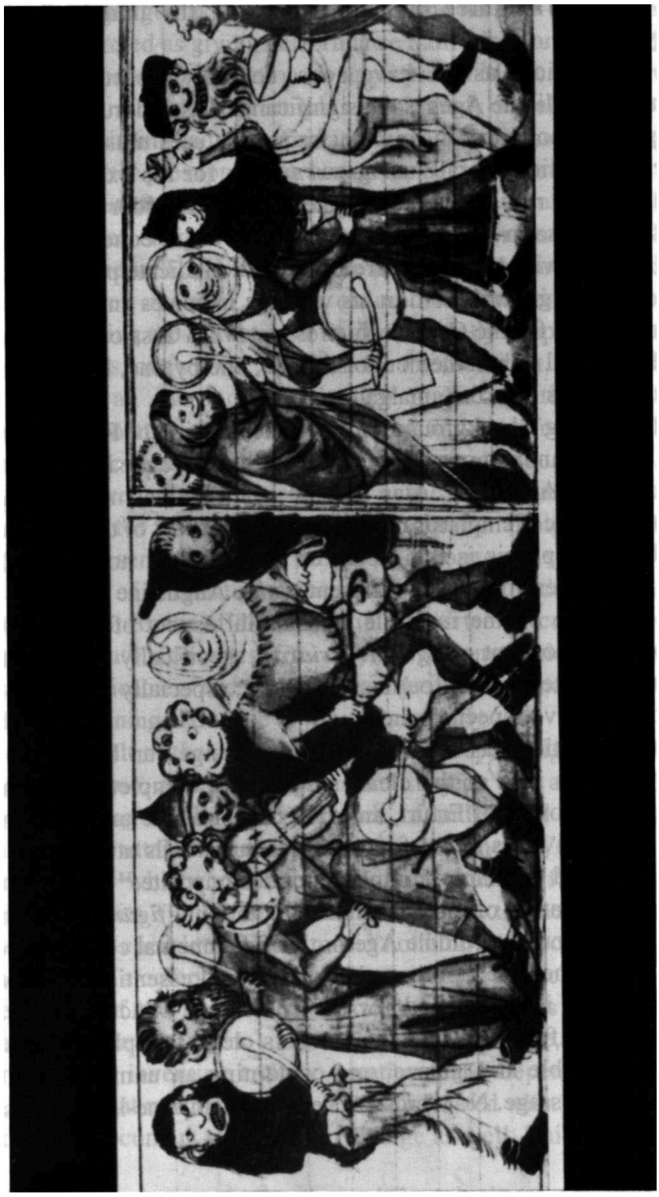
Figura is, by far, the most useful of these terms. One could say that it has the highest energy level, is used most frequently, is defined most often. The reason for its usefulness is that it encompasses both the inner unseen substance and the outer incisive form, that is, inner character and outer gesture. The term was also useful longer. It is the only one of the names and concepts mentioned above that has a logical, intrinsic musical application. This is shown by the fact that it also received a revitalization of its specifically musical significance in the seventeenth century, in terms of musical rhythmic and melodic figures, and figured bass. Another reason for its usefulness is that, as we have seen, the concept and the word *schema* are multivalent. *Schema* could be translated into *figura*, character, letter,

---

[32] Edmond de Coussemaker, *Scriptorum de musica medii aevi novam seriem a Gerbertina alteram,* 3 vols (Paris, 1864, repr. Hildesheim, 1963), I, 369a-377b; III, 118a.

Example 6:

Example 7:



rhythm, number, and sign. It had a variety of significances, none of which was arbitrary. All were related to the idea of inner substance-outer incisive format. The proper placement then, of *figura*, in the medieval brain, was everywhere, in all three parts, the sensory, the imaginative and the memory.[33]

One foundation, as we have seen, for the importance of *figurae* throughout the Middle Ages is the significance Cassiodorus grants them. He places great importance on *figurae*, frequently uses musical analogies for *figurae* and music generally as an *exemplum* for his explanations. Many *figurae* together result in an aggregate which Cassiodorus explains in his conclusion to Psalm 118. Cassiodorus, however, is concerned more with particulars than with totality. There is a word to indicate particulars and this is *figura*; but no general word in his writings indicates entirety. *Symbolum*, however, is used for the Credo, which is just what Cassiodorus describes: a catch of doctrinal fish hauled out of the sea, one by one, by the apostles. A *symbolum* then is a verbal amalgamation.

If, in obtaining a background for our consideration of Robert Grosseteste and the English anonymous writer, we survey the use medieval writers such as Cassiodorus, Augustine, Alan of Lille, and Aquinas made of *figura* we find that each places emphasis on one particular aspect of the *figura* concept. Cassiodorus' emphasis is the aspect of particularity; how each *figura* is different, and, therefore, has a different name. Augustine and Alan of Lille both concentrate on the invisible, substantial aspect of *figura*. Aquinas works over the concept of *figurae variarae*, specifically bringing together these terms. Writers of the fourteenth century, especially on music, discuss the visible, incisive aspect, or *face*.

A transformation has taken place. This change can be named a "new visibility" or the idea of the clear, simple, and complete. The change is identified by Thomas of Erfurt, an *artes* master at the university of Paris, who, in the early years of the fourteenth century, calls attention to the fact that *figurae* could be simple, composite, or decomposite.[34]

The representation of music—musical notational *figurae*—exemplifies, as it had throughout the Middle Ages—this fundamental conceptual change, in which the "inner eye" motivated by letters and essentially involved in a literate process, is exchanged for the "outer eye"—actually *seeing* the significant, signifying image. The result is clear, complete, and separate figures, perceptible at a glance, and containing an unmistakable, totally unambiguous message. No words are necessary, no time-lapse, nor step-by-

---

[33] Cf. Southern's examination of the medieval conceptualization of the brain in *Grosseteste*, p. 40f.

[34] Thomas of Erfurt, *Grammatica speculativa*, ed. and trans. G. L. Bursill-Hall (*The Classics of Linguistics*, London, 1972), p. 184f.

step process is required. An immediate message is instantaneously dispensed and spontaneously received, most of all, by music notational figures.

The purpose of music theoretical writing has often been misunderstood. It has either been judged as derivative, presenting no new or original ideas, or has been interpreted as giving performance indications and transcriptional advice. None of these interpretations is appropriate. Music, a quadrivial art, was the exemplum of the principles explained, usually without any exemplification within theology. This is the reason that most writing using music subject matter presupposes a background. It is nearly always rich in exemplification but lacks thorough explication. Cassiodorus draws attention to this fact, as does Alan of Lille in his *Glosatura in Cantica*.[35] One can look as long as one will, but if one looks only at music notation and music theoretical treatises one will receive exemplification without conceptual substance. In reading these treatises one automatically supplies a conceptual background, that is, one's own, which is, for the most part, anachronistic.

It is perhaps an overlooked fact that music notation is the most immediate representation of music, even today, and even for those who have not been trained to read it with specifically musical understanding. Music notation takes precedence over pictures of music makers and implements or instruments used for music making. Music notational signs are incisive, outer figures representing musical substance or tones. As such, they belong to the mainstream of intellectual preoccupations in the Middle Ages. One of the most important topics of discussion in the thirteenth-century university intellectual climate concerns *figurae*: their constitutions, their inner qualities, their efficacies, and their values. Music notational signs uniquely exemplify the meaning and value of *figurae* generally.

As a direct result of the importance of the concept of *figurae*, and of the discussion, dialogue, and discourse on this subject; and as the result of a new understanding of the independence of individual *figurae*, music notational *figurae* attain new independent significance. We can see this on manuscript pages which contain music. Each musical figure stands for itself, and transmits significance even without text. The concept of the simple, clear, and complete affects music notation too, isolating the music notational sign as a complete sign, or figure, rather than closely combined with the *figura* of the letter. Writers on music, such as the anonymous writer, as well as arts masters such as Franco of Cologne, Lambertus, and others, rather than inventing a music notation that independently indicated rhythm, showed that music notation clearly elucidated what a *figura* was and signified. They document a significant change as well. This documentation

[35] Alain de Lille, *Textes*, ed. p. 184.

extends to the names given to these signs. They are named: the *longa*, *brevis*, and, especially, the *simplex*, *simplices*.[36]

Lengthy, sometimes vehement, discussion on the subject of *figurae variarae* and *figura simplex*—their origins, their forms, and the copulating agent that reasonably bound them together, as well as their unseen significances—left behind important traces. These are typical and significant for western music: the *longa*, the *brevis*, the *simplex*. They are musical *exempla* for the concept of the visibly clear, the simple, and complete.

---

[36] Franco of Cologne, Johannes of Garlandia, Jerome of Moravia, and Lambertus, for example, are listed with short biographies in Palémon Glorieux's repertory of *artes* masters at the University of Paris. They were part of the *artes* group at this university. See Palémon Glorieux, *La Faculté des arts et ses* maîtres, pp. 137, 211-214, 242, 244.

CHAPTER SIX

OPERATIO: TOWARDS A THEORY OF PERFORMANCE IN THIRTEENTH-CENTURY INTELLECTUAL CULTURE

It is difficult to understand what was signified by many thirteenth-century topics of discussion, and why they appeared, at the time, to receive so much attention. They seem to be self-evident to us today. "Performance," its value, significance, and province, as contrasted with, and compared to "precept" is just such a topic. For example, is music not a "performing art?" What *is* music if it is not performed?

Much in every way, the thirteenth-century intellectual would have answered. We shall see how the identification *of* a concept of performance made possible a new emphasis *upon* performance. This took place within the context of a general discussion of productivity. Not only were new terms associated with performance devised and explained, but new musical genres, as well as manners of performance, arose from the careful, conscious articulation of what performance signified. This intellectual background and its musical application will be the focus of this chapter.

At first glance, thirteenth-century intellectual life would seem to have little in common with ours today, so disparate to ours appear the problems and concerns of the early university milieu. There is, however, a close relationship, which will be clarified here. Thirteenth-century intellectuals were, for the first time, concerned with a topic of overriding importance, namely, the subject of performance. They attempt to show how performance is quite distinct from either the intention, or capacity to perform, and they discuss, as well, the benefits and objects of performance. In short, there appears to be an intellectual movement engaged in clarifying what performance actually is: its pertinent, germane territory, and what one could or could not expect from it.

In a performance-oriented twentieth-century culture, this intellectual province may still have relevance. As is the case for other preoccupations of thirteenth-century intellectual life, no discipline could make more clear to a general academic audience exactly what was conceptually at stake as well as the discipline of music. Perhaps the background of the problem, the issues of the discussion, and the exemplification of the entire matter of performance in the discipline of music, far from forming an antiquarian mental curiosity shop, may give us insight into an accepted, if unreflected, component of our own intellectual civilization.

The background to the problem of performance was built slowly and continuously from early Christian times to the thirteenth century

specifically through a long tradition of commentaries on the Genesis creation account. The subject had obvious vitality; it was developed in the early Christian period by Basil, Ambrose, Augustine, to a certain extent by Gregory of Nyssa (in his *De hominis opificio*), as well as by Isidore of Seville in his *Etymologiae*, and by Bede.[1] The reason for this important and extensive cluster of texts, the *Hexaemeron* commentaries, was that the Genesis creation account brought up a progression of vital concepts and issues, namely, that of origin, nature, and of the creative process itself.

Robert Grosseteste, working at Oxford approximately between 1231 and 1235 on this particular project, within the context of his own prodigious reading program, relied heavily upon this extensive *Hexaemeron* commentary tradition.[2] Quoting from Ambrose, Augustine, Bede, and especially from Basil, Grosseteste skillfully weaves a fabric of argumentation around the term *operatio*. He generates a cluster of significances. The interpretation and elucidation of this concept is his contribution to an already lengthy discussion. Grosseteste's discussion of *operatio* also develops a distinction within his own intellectual milieu, that is, a rational, multifaceted theory of performance which he carefully differentiates from closely related concepts, such as *actus*, *vita activa*, and *productio*. It is the multi-faceted nature of the term *operatio*, as well as its unusual, untraditional circumstances that lend credence to the equivalence, *operatio*-performance.

Operatio was also simultaneously discussed in thirteenth-century music theory. In music, obviously, the concept of *operatio* could be both seen—in music notation—and heard, in actual musical sound, thus coalescing the two most powerful sense impressions. Music, as a metaphor, showed a major distinction between the creative process and productive moment.

Grosseteste's introduction to his own *Hexaemeron* commentary thoroughly investigates the origins and meanings of words, using the etymological method. *Operatio* is discussed with its Greek equivalent, *energô*:

> Energia similiter diccio est greca, et signat idem quod operacio, et derivatur ab hoc verbo greco *energô* quod circumflectitur in fine et componitur ab *en* preposicione greca, et *ergô* verbo. Habet autem viva vox latentem operacionem imprimendi fortis in mente auditoris sensum quem intelligit in voce loquens. Ipsa enim loquentis intelligentia vita est et forma vocis verbi ingredientis per aures auditoris.[3]

---

[1] See the bibliography to the *Hexaemeron* of Robert Grosseteste, edited by Richard C. Dales and Servus Gieben O.F.M.Cap., pp. 351-354, for a most useful summary of this commentary tradition, as well as texts included within it available in published editions.

[2] See Grosseteste, *Hexaemeron*, pp. xi-xvii for the position of this work within the career of Grosseteste, and the circumstances of its manuscript transmission.

[3] Grosseteste, *Hexaemeron*, p. 31.

The etymology of the word indicates its basic meaning, that is, "in and of itself." This aspect of self-containment is an essential feature of *operatio's* distinction. The second noteworthy aspect contained in this passage is the relationship, by association, of *operatio* to sound. It is interesting that Grosseteste should, at this point, relate a general comment concerning words, within the methodology of etymology, to this specific example of *energô-operatio.*

The self-contained, "in and of itself" nature of *operatio* indicates a necessary aspect of the term, but also initiates a logical relationship to the self-contained period of time encapsulating this release of energy. The energy is to be applied within a prescribed period of time, the composition. Grosseteste proceeds almost immediately to make this very connection: "Plastes vero dicitur ab hoc verbo greco *plasso* quod est 'manibus compono' et est hoc nomen plastes sumptum a secunda persona preteriti perfecti passivi quod est *peplaste*, et signat formatorem vel compositorem. Ab eodem verbo dicitur *plasma* neutrum, id est factura et prothoplastus."[4]

The context, which does not especially form a logical development from one word to the other, dictates the relationship between the two concepts, *energia/plastes*. The proximity of *energia/operatio/peplaste, et signat formatorem vel compositorem* demonstrates that a lively connection between these terms existed for the writer. This will be the case throughout his careful process of placing together more and more attributes of *operatio*, until, at the end of his *Hexaemeron* commentary, the entire, complete, multifaceted expression of the term stands in place. His methodology is that of etymology, applied centuries before, as well as concurrently, namely, a process of placing together significances rather than showing a logical development of meaning. Quoting frequently from Isidore's *Etymologiae*, from Jerome, and from Origen, he discusses the relationship between the terms, *doctrinam*, *rationem*, and *usum*, a context which discloses *cognicio experimentalis*, and takes an opportunity to make another distinction between a traditional usage and the term *operatio*:

> Ponit autem Ieronimus tria verba greca equipollentia hiis tribus verbis: doctrinam, racionem et usum; sed in nullo exemplari potui adhuc invenire hanc grecam scripturam, nisi ita corruptam quod eam nescivi legere. Pro ultimo tamen trium verborum, quod est usum, ut conicere potui ex pluribus exemplaribus, scripsit *πεῖραν, peiran,* quod satis congruit; *peira* enim est cognicio experimentalis; doctrina autem est grece *didaskalia* et *dogma*, racio autem *logos*. Sed hiis non consonat scriptio corrupta aliqua quam adhuc viderim. Si autem scripserit Ieronimus alia nomina pro hiis, fateor quod illa divinare nescio.[5]

---

[4] Grosseteste, *Hexaemeron*, p. 31.
[5] Grosseteste, *Hexaemeron*, p. 33.

Peiran, or *cognicio experimentalis* is Grosseteste's contribution to the passage. He supplies the concept *cognicio experimentalis*, thus drawing attention to and establishing autonomy for this concept. *Usus* depends, to a certain extent, on comparison with the other two terms of the triad, *doctrinam* and *rationem*, whereas *cognitio experimentalis* is autonomously significant. This concept, illuminated by Grosseteste's reading of Aristotle's *Nichomachean Ethics*, becomes a vital link to sound and life experience, as well as to *operatio*: "Civilis doctrine non est auditor puer proprius, expers enim est earum que secundum vitam operacionum; raciones autem et ex hiis et circa has; amplius autem et passionum insecutores inaniter audientes et infructuose, quia finis est non cognicio sed operacio."[6]

Operatio is distinct from *cognicio* according to its final purpose. In successive passages *operatio* and *exercicio* become intertwined in a cluster of related significances: *operatio*, *exercicio*, *opus*. *Operatio*, as we have seen, is a release of energy within a self-contained period of time, *exercicio* is the on-going practice of that energy. This practice, by and large, is positive: a rustic shoe maker who practices his art is better than an indolent and lazy king, who, by implication, practices nothing at all.[7] Furthermore, human beings have an appetite to operate: *appetitum ad operandum* which takes conspicuous directional forms or *modes*: *operatur propagando, gubernando, in esse conservando creata*.[8] Tenet by tenet, Grosseteste develops his multifaceted concept of *operatio*, according, as he himself states, to an "order of construction." His use of the concepts *exercicio/cognitio* introduces the concept of cognition *through* the practice of the office of an art—or official, understood capacity for practicing an art. What does one learn through the practice of an art, he asks? Why is the *practice* of cognition necessary?

The concept of practice leads Grosseteste to time relationships and *operatio* within time. He contrasts the incomprehensibly fast *operatio* of

---

[6] Grosseteste, *Hexaemeron*, p. 55, cf. Aristotle, *Eth. Nicomachea* I, iii, 5-6, and J.T. Muckle, "Robert Grosseteste's use of Greek Sources in his *Hexameron*," *Medievalia et Humanistica* 3 (1945), p. 36ff.

[7] Grosseteste, *De decem mandatis*, p. 57: Et cum ars bona quelibet melior et utilior sit in cognicione simul et sui officii exercicio, quam sit in sola cognicione, melior est per unamquamque artem operans in quantum huiusmodi quam non operans per eandem. Unde qui per artem sutoriam fuit, inquantum huiusmodi est, melior et laudabilior est non suente. Igitur, circumscriptis animi virtutibus et viciis, sutor et per sutoriam secundum artis sue exigenciam suens melior est carente hac arte et eius exercicio, nisi idem carens tali arte laudabilioris artis sit imbutus pericia et deditus exercicio. Unde, ut dictum est, circumscriptis animi virtutibus et viciis, rusticus sutor melior et laudabilior est rege ditissimo, si equivalentis aut melioris et artis et officii sit rex ignarus et expers.

[8] Grosseteste, *De decem mandatis*, p. 34: Potest quoque per hominem ad quem dirigitur sermo intelligi racio superior, per prolem racio inferior, per servitutem racio inferior admixta sensui, per iumentum ipsa sensualitas, per advenam que est intra portas quicquid ingressum est per portas quinque sensuum et receptum in memoria et sic adunatum anime, quod ipsum possit esse operacionis principium movens scilicet appetitum ad operandum.

God's creative act, a rapidity which is simultaneous in its effect, with other time operations which are successive:

> Insinuatur eciam in eadem verbi consignificacione nulla in operando successio aut ante operacionem successiva deliberacio, sed solum simplex et tota simul eterna provisio; nulla quoque in operando instrumentorum aut alterius rei adminiculacio, sed operatricis virtutis infinita potentia; que tanto operi dedit consumacionem; quam non prehibat operis incoacio.[9]

This particular topic, namely, the contrast between simultaneous and successive operations occupies Grosseteste in several contexts. It is a contrast pair which has infiltrated—naturally enough, since the concepts are ideally exemplified in music with more than one part—the discussion of music composition. In discussing whether or not a composition was, in fact, composed successively or simultaneously, music historians have often been unaware of the fact that they have borrowed a theoretical question with a long tradition, which has Aristotelian impetus.[10] As Grosseteste indicates, the question is unanswerable. God's creative energy in time is both successive and simultaneous; his creative operations occur so rapidly as to be considered "at once."

Operatio implies efficiency. It suggests the competency to cause effect. It, together with associates such as *actus*, *usus*, *exercicio,* can be favorably compared to inanity, vacuousness, and darkness.[11] Useful action contains the "light of organization." The creative process acknowledges the reality of inanity, vacuum, and shadow. The work of a "worker with material" is just the opposite: to purge, refine, illuminate, and to consummate, that is, to bring to a conclusion. Within the concept of this completed work—an *opus*—which is self-contained, refined, concentrated, clarified, and completed, is a sphere of activity, in which transpires the exercise of an action appropriate to the work. This sphere of activity is the operational phase. There are several nuances of meaning implied here; all express

---

[9] Grosseteste, *Hexaemeron*, pp. 67f. Cf. *Hexaemeron*, p. 142: Ambo tamen isti auctores, ut supra dictum est, credunt hos sex dies *per temporum successionem cucurrisse*. Alii autem credunt quod terrenascencia in racionibus causalibus et seminalibus sint *simul subito facta*; *per temporis tamen aliquod spacium ad perfectionem producta* (italics added). See also n. 53 in "Motion," chapter I, above.

[10] The dichotomy is applied to composition for the first time in the fifteenth century, which indicates a change in the purpose of music writing, more than a change in underlying theoretical constructs. Thirteenth-century writers on music, such as the so-called Anonymous IV, do not apply this contrast pair to composition, but it is of interest that this anonymous author's treatise is divided according to *successive* relationships (rhythmic), followed by *simultaneous* intervallic relationships. The structure of the work itself is based on this contrast pair.

[11] Grosseteste, *Hexaemeron*, p. 78: Divina enim operacio racionale mentis purgat, illuminat et consummat. Carens itaque purgacione inane est; carens illuminacione vacuum est; carens consummacione tenebrosum est. Purgacio enim tollit sordes et defectus, et sic ab inanitate liberat.

activity. They are: purgative action, an inclination to action, the usefulness of action, contrasted with the absence of all of these qualities, with the result of inanity. This active dimension is positive. The active phase is "good."[12]

Furthermore, *operatio* is external, making manifest an "inner landscape." It is not inappropriate for Grosseteste, at this point, to discuss the significatory quality of *operatio*: the external operation shows an "inner landscape."

> Moraliter vero terra cordis nostri invisibilis est, cum se non manifestat per lucem bone operacionis; cum videlicet non lucet lux nostra coram hominibus. Incomposita vero est, cum non est ordinata in affectu; tenebrosa vero, cum caret luce sapiencie in mentis aspectu. Nobis enim visibilis est terra interioris hominis per lucem exteriorem boni operis. Vel e contrario ordine mens dicitur invisibilis Deo: que caret luce sapiencie; affectus incompositus: qui caret amoris ordine; totum corpus tenebrosum: quod caret bone operacionis lumine.[13]

"Good works" are compared to "light" which makes manifest the inner man. This statement also sheds light on an emerging concept of performance, namely, that interior capacity is both made known and illuminated by outward performance. On the other hand, there is also an inference that a reciprocity is thereby established: outward manifestation clarifies inner potentiality. This, of course, is part of the immense satisfaction that comes with performance; it reveals inner reality.

Grosseteste's *operatio* is efficacious. He relates this aspect to the operation of the spoken word. Quoting Augustine, he mentions that some words are spoken and immediately thereafter pass away; God's word, on the other hand, coalesces with the operation of a creative act: "Unde Augustinus in libro VII *De trinitate* ait: 'Pater Verbo quod genuit dicens est; non verbo quod profertur et sonat et transit; sed Verbo per quod omnia facta sunt, Verbo equali sibi, quo semper atque incommutabiliter dicit se ipsum.'" *Verbo*, in God's creative efficiency, coalesces with *operatio*: Eterno igitur Verbo operatur omnia.[14]

---

[12] Grosseteste, *Hexaemeron*, p. 79 (a continuation of the above discussion): Consummacio autem, que exerit plenitudinem recepti luminis in manifestacionem perfecti operis, illustrat et tenebras tollit. Vel ordine alio: lumine tolluntur tenebre, purgacione inanitas, consummacione vacuitas. Vel mentis racionale, adhuc imperfectum et informe, tenebrosum est in aspectu, vacuum in affectu, inane a bono actu.

[13] Grosseteste, *Hexaemeron*, p. 81.

[14] Grosseteste, *Hexaemeron*, p. 87. The more extended context quotes from Ambrose's Genesis commentary (*Hex.*, I,9,33 [*CSEL*,XXXII.1,35]): Unde Ambrosius ait: "Non ideo dixit, ut sequeretur operacio, sed dicto absolvit negocium. Unde pulcre illud Daviticum: *Dixit et facta sunt*, quia dictum implevit effectus." Nec esset Deus omnipotens nisi dictione et verbo efficeret quod dicit. Eterno igitur Verbo operatur omnia. Unde Augustinus: "Non temporalibus quasi animi sui aut corporis motibus operatur Deus, sicut operatur homo vel angelus, sed eternis atque incommutabilibus et stabilibus racionibus coeterni sibi sui Verbi, et

Repeatedly, Grosseteste's discussion of an *operatio* concept brings up the fact that *operatio* has a beginning, as well as an end; an *initium* and a consummation.[15] A further implication is that *operationes* have a life of their own, that is, each has an identity of movement based on its inception, middle processional phase, and conclusion: "Ficcio autem Dei faccio eius intelligitur, et vie eius operaciones eius intelliguntur. Principium igitur viarum eius est principium creaturarum eius."[16]

Operatio is accomplished according to individual proclivity, aptitude, and capacity, and within a place.[17] One is struck by both the language used and the succession of ideas in the following passage, quoted by Grosseteste from *De fide orthodoxa* of Iohannes Damascenus: "Dicitur tamen in loco esse et dicitur locus esse Dei, ubi manifesta eius operacio fit. Nam ipse quidem per omnia inmiscibiliter pertransit, et omnibus tradit suam operacionem secundum uniuscuiusque aptitudinem et susceptivam virtutem. Dicitur igitur Dei locus qui plus participat operacione eius."[18]

The implication is that there exists a *place* of operation—a *locus*, implying dimensionality as well as boundaries—and, furthermore, that an operation exists according to, and energized by aptitude and "susceptive" or supportive virtue. We shall see how all three ideas, as well as an exact progression of concepts, is maintained and exemplified in music notational designations. This concept of vital, germane energy contained within material, leading to the perfection or completion of an act itself is discussed further by Grosseteste in the same treatise:

> Que vero habuerunt inclinacionem in materia ad actum essendi aliquid perfectum, non egressa sunt in actum essendi nisi per auctum eterni Verbi. Huiusmodi enim potencia inclinativa per se insufficiens est actum suum educere. Nil autem impedit dictum modum de impressione potencie inclinative ad actum essendi, sive fuerit rerum creacio successiva, sive fuerit subita et simul.[19]

In a passage fraught with interpretational difficulties, Grosseteste delineates the difficult aspect of "inclinative potential leading to act of being," according to germane modes of expression. He invokes dimensions

---

quodam, ut ita dixerim, fotu pariter coeterni Sancti Spiritus sui." This passage compactly shows an important aspect of Grosseteste's written compositional style, namely, that he brings together an entire tradition on a given subject, synthesizing and interpreting this tradition. The extensiveness of his quotations make him difficult to quote, at the same time making his work useful for summarizing each aspect of a complete *operatio* concept.

[15] Grosseteste, *Hexaemeron*, p.94: Vespera autem est consummati operis terminus; mane vero future operacionis inicium.

[16] Grosseteste, *Hexaemeron*, p. 96.

[17] Grosseteste, *Hexaemeron*, p. 123: Que vero habuerunt inclinacionem in materia ad actum essendi aliquid perfectum...(a passage quoted in full below).

[18] Grosseteste, *Hexaemeron*, p. 117, quoting Johannes Damascenus, *De fide orthodoxa*, XIII,2 (ed. p. 57).

[19] Grosseteste, *Hexaemeron*, p. 123.

of time sequence in bringing up the dichotomy, *successive/simultaneous*. Drawing in all cases upon a wide variety of sources for each point that he makes, he refers to *De hominis opificio* of Gregory of Nyssa, Bede's *Hexaemeron* commentary, and to his own *De cessatione legalium*.[20]

All of the aspects of *operatio* deal in one way or another with time.[21] Energy, quality, inclinative virtue, and function according to property, leading eventually to perfection all make time manifest, and, in turn, are made manifest within time's sequence. As Robert Grosseteste states, these attributes "break out" or "erupt" in time: "Per hoc enim verbum effectum est quod vis illa a principio per tempora sequencia erumpit in suum actum." He continues, emphasizing the theological background of the problem he is addressing: "Totum igitur, eterno Verbo dicente, effectum est, videlicet vis motiva eiusque impressio et ab impressa virtute actualis et perseverans mocio."[22]

As Grosseteste carefully, one aspect at a time, forms a complete concept of *operatio*, relating it, at every additional facet, to a clear theological model; we find that the concept contains elements of control—sovereignty—efficacy, power, and result, or, to use Grosseteste's expression, "fruit."[23] The frequency with which the term is used indicates its importance. In addition, Grosseteste repeatedly returns to further delineation of its content and function. Within his thorough discussion of this particular concept, many terms and concepts current in an emerging music theoretical language appear, find format, and gain meaning. These include terms such as *modus*, *ordo*, *proprietas*, *perfectio*, *copula*, and, eventually, *successive*, *simultaneous*, to name a few. A concept, *operatio*, emerges, crafted by Grosseteste from a multiplex received intellectual inheritance, as well as shaped by his own incisive intellect. Grosseteste's *operatio* is independent of other closely-related concepts, such as *vita activa*, *conversacio*, and *actus*.[24]

---

[20] See the editors' notes, Grosseteste, *Hexaemeron*, p. 123.

[21] See Richard C. Dales' edition of *De finitate motus et temporis*, *Traditio* 19 (1963), pp. 245-266.

[22] Grosseteste, *Hexaemeron*, p. 126.

[23] Grosseteste, *Hexaemeron*, p. 152: Generaliter autem in fructificacione intelligitur de virtute procedens bona operacio, et item virtutis operantis eterna remuneracio.

[24] These terms have obvious relationships to the term under consideration; they are, however, used far less frequently than *operatio*. All three occur in the following passage:

Potest quoque viror herbe intelligi novella adhuc et tenera sanctitatis conversacio, robur vero ligni, conversacio eadem cum creverit in solidam perfeccionem. Vita quoque activa quasi pastus est quidam iumentorum, sensuum videlicet carnis; contemplativa vero vita quasi crescit in robur perfeccionis. Facit autem quisque semen et fructum iuxta genus suum, cum non degenerat a summo bono ad cuius ymaginem conditus est, sed secundum hanc generacionem et renovacionem ymaginis sui Conditoris vivit et conversatur. Habet autem semen in semet ipso, cum id quod facit secundum Dei voluntatem a naturali bono non discrepat, sed idem totum indivisibiliter facit per naturale liberum arbitrium quod Deus operatur in eo per graciam. Profert autem hoc semen super terram, cum subicit spiritui carnales affectus (Grosseteste, *Hexaemeron*, p. 153). Both *vita contemplativa* and

Finally, *operatio* is according to "precept" as well as the result of an "inclination to produce."[25] This grants "performance" a dignity which is above instantaneous and transitory sound, as, for example, the sound of a voice. *Operatio* has value which is based upon significance and rationality.[26] Founded upon and originated by precept, produced by an innate capacity for, and inclination toward production, *operatio* has additional intrinsic value because it is accomplished by free will.[27] God, of course, works from this source, and in this manner. Although this theological model of origin is understood, an implication that these qualities adhere to the concept of *operatio* itself, removing the concept, to a certain extent, from God's efficacy, is also clear. There is resolution in *operatio*, and an articulation of reception. Grosseteste presents a concept of "quietude from and within the work" in the context of God's own ceasing from, but remaining within his creative *operationes:*

> Ad hunc modum videtur quod sit quedam pulcritudo disposicionis in rebus conditis, annumerato septimo die quietis. Licet enim quies qua requievit Deus ab omnibus operibus suis non sit aliquod operum eius, potest tamen cum operibus a quibus dicitur facta quies recipere numeracionem et disposicionem conferentem universitati decentem pulcritudinem.[28]

Perhaps no other aspect of this projected system of significances for *operatio* suits musical exemplification so closely. The resolution of the dichotomy *ab operibus/cum operibus* is precisely what is accomplished in a work of musical art, namely, the stance expressed by Grosseteste. Furthermore, music itself is a system of numerical proportions which are appropriate, becoming, interlocking, and fitting; all to be received in a state

---

conversacio differ significantly from *operatio*, in that neither refers to a self-contained unity which implies both individual, particular moment, and continuity. "Action" does not appear to be as comprehensive, nor as multi-faceted as *operatio*: Hee autem quatuor virtutes, vite vegetative et nutritive deservientes, operantur suas acciones per quatuor primas naturales qualitates (Grosseteste, *Hexaemeron*, p. 155).

[25] Grosseteste, *Hexaemeron*, p. 199 (inclinational force to productivity): Quo dicto, Deus et vim producendi animalia viventia terris indidit et actum produccionis movit, quo vis indita in actum essendi animalia produxit; et eiusdem verbi virtute propagantur in posterium species tunc de terra producte; et terra ipsa adhuc multa producit animalia, sine propagacione ex semine, eiusdem primi precepti virtute.

[26] *Per dignitate operacionis* is a phrase that frequently occurs in Grosseteste's *Hexaemeron*.

[27] The topic of "free will" appears in several contexts which have directly to do with *operatio*, for example, in the contrast between the power of astrology *vs* the *operatio* of grace: Quod si dicat aliquis quod mali homines qui sequuntur libidines et passiones carnales subiacent iudicio astrorum, dicendum est ei quod qui nunc malus est, subito potest fieri bonus. Nec hoc predicere est in astronomi potestate, cum hominis conversio sit per operacionem divine gracie (Grosseteste, *Hexaemeron*, p. 168).

[28] Grosseteste, *Hexaemeron*, p. 158.

of mental repose.[29] God's work itself is to separate and to bring together.[30] Separation and conjunction are accomplished through the process of performance.[31] Although, as we have seen, *actus* and *operatio* are related concepts, the aspect of continuity delineates *actus* from *operatio*.

Operatio is ongoing. Grosseteste's term identifies a process in the passage which follows: "Quod si dicat aliquis quod mali homines qui sequuntur libidines et passiones carnales subiacent iudicio astrorum, dicendum est ei quod qui nunc malus est, subito potest fieri bonus. Nec hoc predicere est in astronomi potestate, cum hominis conversio sit per operacionem divine gracie."[32]

In summary, this multifaced concept of *operatio* presents a rationale for performance that is not implicit in the contrast pair *activa/contemplativa*, which is a duality far more general and not self-contained. The contrast pair *vita-virtus activa/contemplativa* depends upon comparison for the substance of each member of the pair. Grosseteste frequently also mentions *conversacio*, and *actus*, in addition to *operatio*, but each with different emphasis. The concepts and terms are by no means interchangeable.[33] In no case, furthermore, do terms necessarily imply that a developmental chain of events must lead to a pragmatic goal, that is, that all concepts are to be considered fulfilled only when they show a practical application. Because of an important background of theological implications leading to a construct of aptitudes for a concept of *operatio*, the concept can be, indeed was, understood by and for itself. The comprehensibility of *operatio* as an autonomous concept, understandable in its own right is based on two factors: the concept of *operatio* had as its foundation a theological construct of God's creative *operatio*, reinforced by an extensive medieval tradition.

---

[29] Grosseteste relates production and productivity to reception:...sed eciam protendit eam per corpus organicum usque ad recepcionem anime...(*Hexaemeron*, p. 200).

[30] Grosseteste, *Hexaemeron*, p. 161: Unde cum nos possimus racione et intellectu a suo subiecto lucem dividere, multo fortius Deus potest hoc abinvicem nutu suo secundum actum existendi separare et post separacionem coniungere.

[31] Grosseteste, *Hexaemeron*, p. 161: Ibi enim secundum vocem Psalmiste: *Vox Domini intercidebat flammam ignis*. Habebat enim ignis ille in rubo virtutem operantem a claritate, ardendi autem virtutem habuit vacantem.

[32] Grosseteste, *Hexaemeron*, p. 168.

[33] See, for example, Grosseteste's discrimination between *conversatio/operatio*: Hec luminaria dividunt diem et noctem, discernunt enim lucem veritatis a tenebris falsitatis, lucem virtutis a tenebris viciorum, lucem sacre conversacionis a tenebris prave operationis (*Hexaemeron*, p. 177); Vel in hoc firmamento sunt sol et luna virtus contemplativa et virtus activa. Stelle vero virtutes particulares, dies lux operis exterioris, secundum quod aliis refulget in exemplum, et suscitat odorem bone opinionis; nox vero opus bonum secundum quod per illud est operator quibusdam odor mortis in mortem (*Hexaemeron*, p. 179);...et eiusdem vi operaciones innascitur. Non laborat in maximis Deus. Non fastidit in minimis...(*Hexaemeron*, p. 186); Vel forte potencia imperfecta elicit ex se actum imperfectum et habet in huiusmodi subiecto actus imperfectus suam utilitatem, quemadmodum in aliis subiectis actus perfectus utilitatem suam (*Hexaemeron*, p. 192).

Grosseteste draws upon, and in many respects, reactivates this extensive background in his own *Hexaemeron* commentary. But another equally important reason why *operatio* could be understood as an independent concept was that it could be exemplified by and made perceptible to both senses of hearing and vision in the art of music. The existence of such a concept as an autonomous entity, with features as well as a structure of its own, facilitated an understanding of another equally difficult concept, namely *theoria*, which Aristotle himself claimed was nearly impossible to comprehend.[34] Nowhere, however, does Grosseteste resort to this concept in his systematic construction of a conglomerate of attributes for *operatio*.

Let us recapitulate its primary attributes. The term, *operatio*, according to Robert Grosseteste. is related to *energia* and to the notion of "in and out of itself." From these two attributes come the concept of an energized, self-contained entity, coalescing with a confined, delimited period of time. The term is associated with several terms implying *production*, and ongoing exercise of an *act*, that is, a *practice*, with a further set of implications—an appetite to continue to do what is appropriate to one's nature, and to the nature of the work. An *appetitum ad operandum* with the additional aspects of *operatur propagando, gubernando, in esse conservando creata* appear to be important additions to this constellation of meanings. The concept of *operatio* also includes, or is related to concepts of *proprietas*, as well as processes which are labelled either successive or simultaneous. *Operatio* demonstrates inner meaning, and is the result of inner significance. As Grosseteste states, *operatio* shows an inner landscape, and, furthermore, is effective. Efficiency and *operatio* are intertwined. *Operatio* replaces a vacuum. Finally, an *operatio* is received, presumably, both by the one perpetuating the *operatio*, but also by an unidentified, unnamed receptor, a "public," so to speak.

When we look at each one of the particular aspects of Grosseteste's concept of *operatio*, we notice that music is the ideal exemplification of each one of them. This is especially true in the realm of the significatory value and function of *operatio*, in which the outer, external manifestation—the performance of a work—demonstrates an inner, unseen musical propensity, vitality, inclination, and talent, as well as the capacity to exercise—to train—this talent. It is probably safe to say that in no other art is this external/internal relationship so immediately apparent, and with so little ambiguity. The inner landscape of constant internal musical activity

---

[34] *θεωρία* is presented as a tripartite operation in several contexts in the *Metaphysica*, cf. i.2.983al4: amazement at the beginning of a process proceeding to its contrary; i.3.983a34; i.4.985a29ff, iii.l.995bl5, the entire context, iii.2.996al9-b25, iii.4.999a25, and, especially, i.5.985b27, a passage which contains nearly all of the important concepts related to *theoria*, as well as van Deusen, "The musical Modistae" in *The Harp and the Soul, Essays in Medieval Music*, p. 306.

involving the entire psyche, past and present, is immediately put on display as soon as a musician takes up his instrument or begins to sing.

Operatio demonstrates. Grosseteste quotes Ambrose, who was considering the nineteenth Psalm which begins, in the English translation: The heavens declare the glory of God, and the firmament showeth his handiwork.[35] The "firmament" is a demonstration, an exposition of the operator. *Operatio*, in contradistinction to other related terms, such as *actus*, *virtus activa/contemplativa*, or *conversacio* is a complex, multisignificant term. The concept acquires significance, aspect by aspect, as we have seen, in the writings of Robert Grosseteste. His frequent mention of the term, as well as careful exposition of its many attributes show its importance. He places modifiers, nouns, and verbs, such as *anima vivens atque motabilis*, *diligens*, *per dileccionem* in its proximity. *Operatio*, a self-contained entity, is effective by means of movement, time, and diligence based on love. The motivation to *operatio* is love. Again, nothing could demonstrate this concept, in all of its manifold significance, better than the art of music.

One searches in vain for a concept of *operatio* in music theory before the thirteenth century. Guido of Arezzo, writing around 1000, mentions the exercise of a musical art, and of notation,[36] of singing and *cantores*, a Boethian distinction between *musicus* and *cantor*, and modes of properties, as well as means of exercising these properties;[37] but nowhere does he formulate, or even show the intention to consider an all-embracing performance concept. Further, the term *operatio* does not appear. It has been a commonplace to state that early medieval music theory is far more taken with abstract relationships than with musical performance. This is true, but one can go even further to say that there is no term, with implied concept, for it.

This is not true for Anonymous IV. This thirteenth-century writer makes ample use of the term in the following contexts: *operatio* is according to rule. It, therefore, adheres to a system of rules of practice.[38] There are modes

---

[35] Grosseteste, *Hexaemeron*, p. 96: Ficcio autem Dei faccio eius intelligitur, et vie eius operaciones eius intelliguntur.

[36] Guido of Arezzo, *Micrologus* (ed. J. Smits van Waesbergh, *CSM* 4 [Rome, 1955], pp. 82, 85:...de ecclesiasticis utilitatibus ageretur *exercitium musicae artis*;...ex nostrarum notarum *usu exercitati* ante unius mensis spatium invisos et inauditos *cantus* ita primo intuitu indubitanter cantabant, ut maximum plurimis spectaculum praeberetur; quod tamen qui non potest facere, nescio qua fronte se *musicum vel cantorem* audeat dicere (italics added).

[37] Guido of Arezzo, *Micrologus*, p. 158: ...troporum *exercitati ita proprietates* et discretas ut ita dicam, facies extemplo ut audierint, recognoscunt, sicut peritus gentium coram positis multis habitus eorum intueri potest et dicere....

[38] *Anonymus IV*, ed. p. 70: Et nota, quod quando contingit operari per istam regulam, si termini unius proportionis multiplicentur per eundem numerum, semper resultabit eadem proportio.

of operations.[39] Anonymous IV relates *operatio* to intellectual habits and cognition, as did Robert Grosseteste, and, in this context, brings up the matter of internal *proprietas*, a relationship which, again, Grosseteste discusses in detail:

> Ea quae dicuntur cum proprietate et sine perfectione, erant primo confuse quoad nomen. Sed per modum aequivocationis accipiebantur, quod quidem modo non est, quoniam in antiquis libris habebant puncta aequivoca nimis, quia simplicia materialia fuerunt aequalia. Sed solo intellectu operabantur dicendo: intelligo istam longam, intelligo istam brevem.[40]

The concepts of *proprietas* and *perfectio* are common to, and frequently mentioned by, both writers. Finally, Anonymous IV sets forth a concept of performer, *operatores*, which is commensurate with Grosseteste's *cooperatores*. In both cases, this is the final attribute of a multivalent consideration of *operatio*. It is significant that *operatores/ cooperatores* should sum up both discussions of *operatio*. The implication, for Grosseteste in his *Hexaemeron* commentary, is that, as the result of the fact that we imitate God, we are *cooperatores* with God:

> In omnibus enim que divinitatis sunt, imitatur, ut dictum est, propinquissima imitacione homo Deum. Quod nulla irracionalis facit creatura...Licet enim multa predicentur de Deo que non predicantur de homine, utpote quod creator est, quod eternus est et huiusmodi, tamen homo participat eternitate et creandi quadam imitacione vicinius et similius omni creatura carenti racione. Cum enim gracie Dei inspiracione efficimur nova creatura, cum simus in hoc Dei coadiutores et cooperatores, sumus quoddam huius creacionis inicium, et operacionis que creacio est gerimus manifestissimum imitatorium vestigium.[41]

This passage, with the term presented, forms a logical conclusion to Grosseteste's comprehensive discussion of *operatio*. The term also concludes the anonymous author's concise, but multivalent discussion of the term. It is significant that the term *cooperatores* is used, demonstrating that *operatio*, by extension, operator, has considerable specific meaning. "Much is preached concerning God," remarks Grosseteste, "but little preaching is done

---

[39] *Anonymus IV*, ed. p. 75:...discantus debet opposito modo operari, si naturaliter habet. Et differentia est inter istos et discantatores, qui dicuntur plani cantores, quoniam plani discantatores, si tenor ascendit, et ipsi ascendunt, si tenor descendit, et ipsi descendunt; isti autem non, sed secundum modum praedictum. Et notandum, quod triplices sunt discantatores:...qui sunt plani et novi...qui habent in usu alium modum praedictum, et sunt veri discantatores... Notandum, quod triplex est modus faciendi discantum secundum veros discantatores.

[40] *Anonymus IV*, ed. p. 49.

[41] Grosseteste, *Hexaemeron*, p. 242; cf. *Anonymus IV*, ed. p. 56: Et hoc plane patet in *Alleluia Posui adiutorium* in loco post primam longam pausationem, et quidam dicerent: post primam clausulam notarum, quod alii nominant proprie loquendo secundum operatores instrumentorum punctum, et dicerent tunc: post primum punctum plenius patet, aliter: ut patet in secundo puncto eiusdem *Alleluia* etc.

on the subject of man, who is eternal, and created in imitation of God. By the inspiration of grace, effecting a 'new creature,' we are co-performers—*cooperatores*—with God." The implication is, that by this very *operatio*, man partakes of God's effective, performative power.[42]

[42] Cf. Grosseteste, *Hexaemeron*, p. 242. The imitation is according to *anima*, not *corpus*. Cf. Grosseteste, *Hexaemeron*, p. 243: Et quia homo secundum racionem et intellectum est Dei imago, non autem secundum corpus vel corporalia...

CHAPTER SEVEN

COMPOSITE HARMONY: AN ASPECT OF THE CONCEPTUAL BACKGROUND TO THE PROBLEM

In 1156, Henricus Aristippus finished his translation, from Greek into Latin, of Plato's *Phaedo*. This translation made available a complete Platonic dialogue in Latin, without abridgment or commentary, for the first time since Antiquity .[1] By the first generation of the thirteenth century, the translation was available in Paris; by 1300 there were copies of the translation at principal locations, such as in the library of the Sorbonne.[2] Petrarch, for example, owned a copy of the Latin *Phaedo*, studied it carefully, as his marginal notes indicate, and complained that he lacked sufficient fluency to compare it with the Greek original.[3] We know that Aristippus' Latin translation was sought after, prized.[4] Although Robert Grosseteste does not directly quote from or refer to the *Phaedo*, as he does the *Timaeus*, as well as the *Parmenides*, the concept of composite harmony directly coincides with the concept of harmony he himself extends. Composite harmony is the principal theme of the *Phaedo*, therefore, it is important to consider the newly-translated dialogue as a background to a

---

[1] See Raymond Klibansky's discussion and summary of the literature in *The Continuity of the Platonic Tradition during the Middle Ages*: *Outlines of a Corpus platonicum medii aevi* (London, 1939, with new prefaces and supplement repr. Munich, 1981). The fascinating, unresolved problem is whether the medieval reception of Plato's works can be viewed as primarily continuous or full of abrupt, even cataclysmic, changes and what these changes are. Klibansky's "continuity" minimizes the impact of the translation of Platonic texts on the intellectual community of the thirteenth to early fourteenth centuries. The translation of the *Phaedo* made a complete Platonic treatise available for the first time since antiquity, as the *Timaeus* was only partially translated by Chalcidius (*Timaeus*, ed. J. H. Waszink, in the *Plato latinus* series, IV, ed. R. Klibansky, London, 1975). The principal difference between Chalcidius' translation of the *Timaeus* and Aristippus' translation of the *Phaedo* was that Plato's text was extended, one might even say, overwhelmed, by Chalcidius' commentary, whereas Aristippus presented the *Phaedo* as a whole. This is, of course, not to say that he did not emphasize and focus upon certain concepts by his use of particular Latin expressions in his translation of Greek terms. This aspect will be studied in more detail below.

[2] The manuscripts sources are given in detail in: *Phaedo interprete henrico aristippo edidit Laurentius Minio-Paluello* (*Plato latinus* II, London, 1950), pp. x-xlx. See also Klibansky, *Continuity*, p. 29-31: "The Latin Manuscripts and their History." Early manuscripts of the *Phaedo* include Paris, Bibliothèque nationale fonds lat. 16581 which belonged to Gerard d'Abbeville, who bequeathed it to the Sorbonne where it was accessible to the Latin-reading public after 1271. Codex Vatican Library vat. lat. 2063 was written for, and owned by Coluccio Salutati.

[3] Petrarch's copy is Ms Paris, Bibliothèque nationale fonds lat. 6567A. (See A. Hiler, "Petrarch's Greek Codex of Plato," *Classical Philology* 59 [1964], 270f.)

[4] For a more extensive treatment of this aspect, van Deusen, "The Image of the Harp and Trecento Reception of Plato's *Phaedo*," *Florilegium* 7 (1985), pp. 155-178.

distinctive thirteenth-century concept, which differed radically from an earlier medieval view of harmony.

The subject we have addressed brings up the entire problem of the transmission and influence of Platonic works in the early university intellectual milieu. Despite acknowledged interest in the newly-available Platonic dialogue, it is not a straightforward matter to find direct traces of the influence of Plato's *Phaedo*. One of the chief reasons for this is that Plato is difficult to quote.[5] His use of the dialogue form and his varieties of exemplification disperse the tenets of his argumentation. The strands of his arguments elude systematization. The reader is invoked—drawn in—by the *interrogatio-responsio* format; but a good deal is also required of him. He must organize and come to decisions regarding both the meaning and directionality of many of the statements contained in the dialogue, as well as the genre to which these statements belong. Most importantly, the reader must decide whether single passages should be interpreted literally or allegorically. The *Phaedo* was not a text selected for inclusion in the early university *artes* curriculum—either at the University of Paris or at Oxford—and, virtually devoid of succinct epigrams, the influence of the Latin *Phaedo* cannot be traced by means of short, recognizable quotations, as, for example, is the case with the *Metaphysica* of Aristotle, with its clarion-call opening sentence, "All men by nature desire to know."[6] Therefore, in spite of the wide spectrum of quotations to be found in all of the works attributed to Grosseteste, not one extensive quotation from the *Phaedo* is to be found. The influence of this Platonic work, is, nevertheless, a catalytic one in an emerging thirteenth-century concept of harmony.

Where then, and how, can the influence of Plato's *Phaedo* be found and assessed? What significant points were made within the linguistic framework of the twelfth-century Latin version of this dialogue? In comparing both Greek and modern English versions with the medieval Latin translation, one observes an example of an important general fact concerning the translational process itself. Henricus Aristippus translated into his text what he himself knew, amplifying Plato's text by his own knowledge of Aristotle's *Metaphysica*.[7] Finally, one of the reasons—aside from its

---

[5] See Klibansky, *Continuity*, p. 25-27 for the indirect tradition of Platonic ideas.

[6] The opening line of the *Metaphysica*, as concise and complete as it is, wherever it may occur, immediately points the reader to the writer's conceptual source, no matter how imbedded the quotation may be. Plato's arguments, on the other hand, are intertwined with myths, their narrative constructs separated by the dialogue form. Since they also require considerable interpretation from the reader, they cannot be singled out for quotation so easily. Several have pointed out that *Florilegia*, or collections of quotations attributed to Plato, were usually not actually from Plato.

[7] Aristippus' knowledge of Aristotle's work can be deduced from the fact that he translated Book IV of the *Meteorologica*, but there are indirect reasons as well, the vocabulary he uses and the focus of his arguments. This aspect will be treated in part here,

novelty at the time—that the Latin *Phaedo* was influential was that it reinforced and, concurrently, was reinforced by other texts which were of particular importance during the years shortly after its translation, namely, Boethius' *Consolation of Philosophy*, Augustine's *Psalm Commentaries*, and Aristotle's *Poetica*. The primary themes of all four works dovetail.[8] They include the nature of good and the nature of invisible reality.

Another reason, however, for the *Phaedo*'s influence, was that the work contained compelling subject matter, presented in an intensely dramatic setting. The soul is the main subject of the *Phaedo*. Socrates discusses with his anxious disciples the question of whether a philosopher may reasonably greet death without fear. The answer is clear: yes, indeed, for the following reasons. The spiritual world of pure ideas exists apart from a specific, concrete, material disclosure of these ideas, just as the concept of beauty itself exists apart from, and more completely as a concept, without a specific manifestation of that which is qualitatively beautiful.[9] A concept is

---

but deserves a separate study. (See Bernard G. Dod, "*Aristoteles latinus*" in the *Cambridge History of Later Medieval Philosophy* [CHLMP], especially pp. 74-79, which is a Table of Medieval Latin Translations of Aristotle's Works and of Greek and Arabic Commentaries.)

[8] Robert Grosseteste makes this point of connection between Plato and Augustine in his commentary on Aristotle's *Physica* (ed. Richard C. Dales, Boulder, Colorado, 1963, p. 54): Est infinitum quia ipsum est et potencie et sapiencie et bonitatis infinite et secundum quod Plato et Augustinus loquuntur de numero: numerus et sapiencia idem sunt et sapiencia Dei numerus est infinitus et infinite sunt ydee sive raciones rerum in sapiencia divina, cf. 61: Plato vero et Augustinus, qui consideraverunt quod in mente divina est sapiencia infinita et raciones rerum eterne infinite, posuerunt numerum infinitum abstractum a sensibilibus et ipsum esse principium omnium et exemplar. Ipse enim numerus sapiencia est divina secundum quod numerus attingens a fine usque ad finem fortiter secundum quod sapiencia disponens omnia suaviter et est arismetrica magis de illis numeris eternis quam de numeris temporalibus. Grosseteste then brings up the concept of body and composite body: Item probat magis physice quod non est corpus in infinitum in augmentum quia neque corpus compositum neque simplex, ut elementum, est infinitum. Si enim elementa finita sunt et multitudine et magnitudine, patet quod compositum ex hiis finitum est. With respect to composite harmony (Grosseteste's *concord*), Plato, and Boethius, *Consolation of Philosophy*, cf. Grosseteste, *Hexaemeron*, p. 59:...Aristotiles, tam greci quam arabes, dictum locum de perpetuitate motus et temporis et mundi, id est eorum *duracione ex parte* utraque in infinitum, *concorditer* exponunt. Boecius quoque in libro *De consolacione philosophie* evidenter asserit tam Aristotilem quam Platonem censuisse mundum inicio caruisse.

[9] *Plato latinus*, ed. Minio-Paluello, 74. c. 16, p. 28: Ipsa equalia est quando inequalia tibi videantur, equalitas inequalitas? which leads to (74. d. 6, p. 29) Nonne ergo fatemur, quociens quis quid videns animadverterit quoniam vult quidem hoc, quod nunc ego conspicio, esse quale aliud quid eorum que sunt, deficit autem et nequit tale esse equale quale illud, immo est deterius, necesse quoque eum qui hoc mente perpenderit prescisse illud cui ait ipsum assimilari, minus vero habere?...Necessarium igitur nos prescisse hoc equale ante illud tempus, quando primum videntes equalia intelleximus quoniam appetunt universa hec esse quale hoc equale, habent vero minus. (But now, what about equals themselves? Have they ever appeared to you to be unequal, or equality to be inequality?...However, that point is immaterial; but so long as the sight of one thing leads you to conceive another, whether like it or unlike, a case of reminder must have occurred. And to continue, in the instance of those equal logs and other equal objects that we mentioned just now, is it our experience that they appear equal to the same degree as the equal itself? Is there some deficiency in respect of

limited by its material expression.[10] As pure concepts exist apart from their material expression, so the spiritual element, the soul, exists apart from the body.[11] In a key passage concerning the substance of the soul, Plato makes a unique statement about a relationship, and presents a definite symbol:

> In this, said he, one might use the same argument about harmony and a lyre with its strings. One might say that the harmony is invisible and incorporeal, and very beautiful, and divine in the well attuned lyre, but the lyre itself and its strings are bodies, and corporeal and composite and earthy and akin to that which is mortal. Now if someone shatters the lyre or cuts and breaks the strings, what if he should maintain by the same argument you employed, that the harmony could not have perished and must still exist? For there would be no possibility that the lyre and its strings, which are of mortal nature, still exist after the strings are broken, and the harmony, which is related and akin to the divine and the immortal, perish before that which is mortal. He would say that the harmony must still exist somewhere, and that the wood and the strings must rot away before anything could happen to it. And I fancy, Socrates, that it must have occurred to your own mind that we believe the soul to be something after this fashion; that our body is strung and held together by heat, cold, moisture, dryness, and the like, and the soul is a mixture and a harmony of these same elements, when they are well and properly mixed. Now if the soul is a harmony, it is clear that when the body is too much relaxed or is too tightly strung by diseases or other ills, the soul must of necessity perish, no matter how divine it is, like other harmonies in sounds and in all the works of artists, and the remains of each body will endure a long time until they are burnt or decayed. Now what shall we say to this argument, if

---

the likeness of the former to the latter, or is there none?...So it necessarily follows that we knew the equal at a time previous to that first sight of equal objects which led us to conceive all these as striving to be like the equal, but defectively succeeding. [Plato's *Phaedo*, translated with an introduction and Commentary by R. Hackforth, Cambridge, 1955, pp. 68-70.])

[10] 79. a. 15, p. 35: Ponamus ergo, si velis, duas species encium, hoc quidem visibile, illud vero invisibile? Et invisibile semper secundum idem se habens, visibile vero numquam secundum idem? Nostrum ipsorum hoc corpus est, illud vero anima.

[11] 76. a. l, p. 3l: Possibile enim hoc eciam apparuit, sensu percipientem quid vel videntem vel audientem vel aliquem alium sensum sumentem, diversum quid ab hoc animo concepisse, quod oblivione deletum erat, cui hoc assimilatum est simile existens vel cui dissimile. Eapropter, quod dico, duorum alterum, vel scientes illa geniti sumus vel scimus in vita universi, vel posterius, quos dicimus addiscere, nichil nisi reminiscuntur illi, et disciplina mencio utique erit. (The reason being that we found that it was possible for a person who had seen or heard or otherwise perceived an object to go on to conceive another object which he had forgotten, something with which the first object was connected, whether by resemblance or contrast. Hence my two alternatives: either we are all of us born knowing the things in question, and retain the knowledge throughout our life, or else those who are said to learn are simply recollecting, and learning will consist in recollection [Engl. trans. p. 72].) The Latin translation, generally speaking, emphasizes words implying vision, seeing; whereas this English translation interprets the passage by the use of *conceive*.

> anyone claims that the soul, being a mixture of the elements of the body, is the first to perish in what is called death?[12]

Plato continues later: "...for the doctrine that the soul is a kind of harmony has always had (and has now) a wonderful hold upon me, and your mention of it reminded me that I had myself believed in it before." He then quotes Socrates:

> And Socrates said, you must, my Theban friend, think differently, if you persist in your opinion that a harmony is a compound and that the soul is a harmony made up of the elements that are strung like harpstrings in the body. For surely you will not accept your own statement that a composite harmony existed before those things from which it had to be composed, will you? Certainly not, Socrates. Then do you see, said he, that this is just what you say when you assert that the soul exists before it enters into the form and body of a man, and that it is composed of things that do not yet exist? For harmony is not what your comparison assumes it to be. The lyre and the strings and the sounds come into being in a tuneless condition, and the harmony is the last of all to be composed and first to perish. So how can you bring this theory into harmony with the other?[13]

The passage quoted is climactic because it contains the principal themes of the entire work. These themes, which are also emphasized by the translator's selection of terms in its Latin translation, are: 1) vision, visibility, and the visual process, as well as the accessibility of unseen realities in a reciprocal or exchange process, whereby the unseen attains seen equivalence. This equivalence is represented by 2) *figura* and the relationship of *figura* to *modus*, or by 3) *lira*, an extension of the same idea of seen equivalence for an unseen reality. *Lira* = harmony. Finally, 4) a principle of governance, of rule by necessity is presented, as well as 5) harmony, which is the point of every argument. These areas seem unrelated; furthermore, each would appear to be too all-inclusive to be treated with completeness and comprehensibility. Yet all are united by a single theme since all arguments eventually lead back to this theme. The principal point of the dialogue is simultaneously-occurring *harmony*.

First, Plato's concept of vision is the underlying foundation for his subsequent argumentation. The Latin *Phaedo* is filled with words implying

---

[12] The *Phaedo* is full of implied harmonies. Other harmonies include, for example, the balance, in a healthy personality, between an inordinate care of the body and total neglect leading to suicide.

[13] 80. b. 9, p. 37: Speculare, O Cebes, si ex omnibus que dicta sunt hec nobis contingunt, divino quippe et immortali et intelligibili et uniformi et indissolubili et semper similiter secundum idem se habenti sibi ipsi simillimum esse anima, humano sane et mortali et insensato et multiformi et dissolubili et numquam secundum idem se habenti sibi ipsi simillimum rursus esse corpus. Habemus quid preter hec aliud dicere, o dilecte Cebes, vel non ita se habet? (It should be noted that *speculare* and other forms of vision words are used by the translator. *Theoria*, or verb forms thereof, are not employed at all, neither in the Latin translation of the *Phaedo*, nor does *theoria* occur in the Greek.)

sight, the object seen, the process undergone by which sight is accomplished, and substitutions for missing vision. One of the principal aspects of this topic is the significance of seeing. Opening discussions set up the basis for further themes which also deal with vision, types or modes of shapes, the object substituted for an absent thing or personality, and seen objects in an ongoing progression of visual images. Finally, Plato discusses the connection process itself which binds seen objects to inner unseen significance. The binding power itself is invisible.

In the visual process, Plato argues, one is constantly constructing a series of equal, rational, proportional relationships on the basis of actual, implied, or even remembered sight. One, therefore, observes things as either equal or unequal, similar, dissimilar, or diverse. There are, namely, two categories under consideration, things visible and those which are invisible. Plato asks, can the eye perceive, and the mind understand, equal things; and, what is more difficult, an equivalency of visible things substituted for invisible? In other words, can abstractions or unseen things be assimilated by eye and ear? Yes, indeed they can, writes Plato. The concept of equality must first be understood, then one must realize that an exchange of the invisible and conceptual for the perceptible and visible has taken place. First, equivalency must be established, followed by a clear perception of the unseen reality represented by, and in an equivalent relationship to, the perceived corporeal physical reality. Vision then is actually a substitution for what cannot, in fact, be seen. What is seen is concrete, corporeal, visible, composite, changeable, and transient. The invisible, however, is essential and unchangeable.

An accumulation of knowledge is impossible unless things which would otherwise pass into oblivion—since no one can see all things simultaneously— can be recalled. In order, therefore, for particular events to be collected together long after they have actually taken place, recollection, or the substitution of visible things for past events, must take place. It is clear that this is a necessary step in the progression from particular event to universal generality. In order for the passage from particular to universal to take place, recollection must occur. Recollection requires both a capacity and an activity. It is a harmony of balanced functions, such as the integration of known, experienced, particular events combined with the conceptualization of abstractions, such as "equality," and requires the balance of inner mental repose in harmony with intense intellectual activity.

Plato thus sets up a mental background which he uses to explain abstractions, such as *composite*, which is the conceptual goal of every argument in the dialogue, and the distillation of every discussion. The dual, logically-related ideas of the substitution of seen representative figures for unseen realities, and, furthermore, that these invisible realities, recalled to mind by visible objects, could, in fact, be composite are the two most

important and influential concepts which were released by the translation of this dialogue. The influence of the Latin *Phaedo* is conceptual rather than epigrammatic. The two ideas were so basic that they quickly found widespread application, but perhaps nowhere was their applicability so apparent as in the discipline of music.

Composite is perhaps one of the most abstract concepts possible. To imagine, without particular exemplification, multiform parts contingent upon one another so as to form a unity requires a well-trained, disciplined, theoretical mind. If it is possible to imagine a composite, then Plato's previous discussion is tenable; namely, that visible, corporeal things can be substituted for inner, invisible abstractions. It is particularly significant that the *partes*, distinct aspects, or shapes collected together to form a composite are rendered *modes* by the Latin translator. The term, *modus*, occurs frequently in the Latin translation; its frequency of use indicating its importance and offering a way of tracing the translation's influence. In each of many contexts mode implies both separation and conjunction, parts and cohesive composite. "Mode" is singular, distinct, and characteristic, but occurs in an associative context.[14]

Each mode is recognizable and distinct according to its properties. The particularity of each characteristic mode is easier to grasp than the concept of a construct, a compilation, or an association of modes, each one indicating a distinct part; but both characteristic singularity, and a unified totality are important to Plato's discussion and are emphasized in its Latin translation.[15]

---

[14] The frequency of use of *modus* is shown by this passage of the Latin translation (78. d. 21, p. 34): Veniamus itaque in hec in que in priori disputacione. Ipsa essencia cuius racionem dedimus existendi et interrogantes atque respondentes, utrum semper eodem modo se habet secundum idem seu aliter alio modo? Ipsum hoc equale, ipsum hoc honestum, ipsum unumquodque quod est, ens, numquid permutacionem eciam quamcumque recipit? Vel semper eorum singulum quod est, uniforme ens ipsum secundum se ipsum, eodem modo secundum idem se habet, et numquam nulla racione nullatenus nullam alteracionem recipit? Eodem modo necesse secundum idem se habere, O Socrate. Modes were divided and separated according to a substance and unseen essence, or, in other words, an inner, individual, essential vitality. The most comprehensible way to explain these vitalities was with the concept of virtues. See also the discussion of *modes* as *partes* above.

[15] 82. e. 25, pp. 40ff: Cognoscunt siquidem amatores scienciarum quoniam assumens ipsorum animam philosophia mirabiliter ut iunctam *corpori atque conglutinatam, compulsam vero quasi per incarceracionem per hoc speculari* que sunt et non ipsam per se ipsam, et in omni impericia convolutam, et carceris molestiam perspiciens quoniam per concupiscenciam extat, utcumque precipue ipse vinctus adiutor fuerit ad vinciendum,—quod autem dico, cognoscunt disciplinarum amatores quoniam ita assumens philosophia se habentem ipsorum animam tranquille consolatur et solvere articulatur, declarans quia fallacia quidem plena per oculos examinacio, fallacia vero per aures et alios sensus, persuadens ex hiis discedere quantum non necesse ipsis frui, *ipsamque in se ipsam colligi atque coherceri precipiens*, credereque nulli alii nisi se sibi, quoniam utique intelligat ipsa secundum se ipsam ipsum secundum se ipsum quod est: aliquando vero per alia consideraverit in aliis existens, aliud nichil autumare verum; esse profecto *quod tale est sensibileque et visibile, quod autem ipsa videt intelligibileque et invisibile. Huic tamen solucioni haut dignum ducens oportere contraire quam vere philosophi anima hactenus abstinet a voluptatibus et tristiciis et*

The harmony or connection between unseen and seen realities, between sensual experience and recollected knowledge; and the harmony of individual characteristic parts adhering to a perceived totality—all abstract themes—find a convincing relationship to one another, and are exemplified in the image Plato brings to mind. It is the construct of a *lira*, interpreted also as the harp, a word that, despite its seemingly general nature, is used in no other Platonic dialogue.[16]

The *lira* as a recognizable construct exemplifies everything Plato had discussed. It is an image, almost linear in the spareness of its construction, composed of parts, which also could bring to mind recollected experiences, or music played upon it, emanating from it, as well as images of its player, and its owner:

> Well, you know how a lover feels when he sees a lyre or a cloak or some other object commonly used by his beloved: he apprehends the lyre, but he also conceives in his mind the form of the boy to whom it belongs; and that is reminder. Similarly one who sees Simmias is often reminded of Cebes, and we could think of any number of similar cases.[17]

This passage gives a rationale for the substitution of figures, or letters, for objects which are no longer there. It makes possible an understanding of writing, as well as of the symbolic image. Nowhere, however, is *symbolum* used in the Latin translation. The reason for both writing and image is the same, that is, so that which is recorded will not fade into oblivion.[18] There is a pronounced emphasis in the Latin translation on the written word and

---

concupiscenciis atque timoribus quantum valet, cogitans quoniam, ex quo plurimum exultet aut tristetur vel metuat sive concupiscat, nullum eatenus malum tolleravit eorum que quidem quis existimaverit, quemadmodum egrotans seu in aliquo consumptus propter concupiscencias, immo quod cunctorum maximum malorum et ultimum, hoc perpetitur et non mente discutit ipsum.

[16] What one would like to know is not what organological properties the *lira* possessed at the time of Plato's writing, nor how Plato himself understood the instrument, but rather how the term *lira* was received, and what the term's Latin medieval readership made of it.

[17] 73. d. 9, p. 27: Nonne igitur nosti quoniam amatores, quociens videant liram seu vestimentum sive aliud quid quibus pueri eorum consueverunt uti, perpeciuntur hoc: cognoverunt autem liram, et in mente susceperunt speciem pueri cuius erat lira? Istud autem est commemoracio; veluti eciam Simmiam quis videns Cebetis reminiscitur, et alia decem milia talia utique sunt.

[18] A mandate for writing is summarized in the following passages (73. e. 16, p. 27): Numquid non tale recordacio quedam est? Percipue certe quociens quis hoc paciatur circa illa quorum sub tempore et eo quod non intenderit iam oblivionem sumpserit? Quid igitur? Est equum scriptum videntem et liram scriptam hominis reminisci, et Simmiam videntem scriptum Cebetis recordari? Nonne eciam Simmiam videntem scriptum, ipsius Simmie recordari?...Ergo igitur nonne secundum universa hec contingit monimentum esse quidem a similibus, esse eciam a dissimilibus? Ceterum quociens a similibus meminerit quis alicuius, nonne necesse ad hoc eciam simul pati, intelligere sive in quo defecerit hoc secundum similitudinem sive minime illius cuius reminiscitur?

upon writing itself, an emphasis which is not particularly apparent in either the Greek or English versions.[19]

Lira is a visible construct, a corporeal substitute for invisible realities. Plato plainly makes this point and reiterates it for emphasis, using several examples in order to increase understanding of this crucial matter. In part, the *lira* represents harmony. Harmony itself is invisible, incorporeal, and, in the language of the *Phaedo*, closest to the highest good. The *lira* is visible, a composite constructed of diverse materials—wood and strings—corporeal, terrestrial, and, therefore, perishable.[20] By its visible presence, it both brings

---

[19] The English translation of the above passage does not appear to reinforce the concept of writing at all (p. 68: Reminder then may take that form: but it is most apt to occur in connexion with things that we have forgotten owing to the lapse of time and our not having thought about them. Another point: is it possible to see the picture of a horse or a lyre and be reminded of their owner: or again to see a picture of Simmias and be reminded of Cebes?).

[20] 85. e. 22, pp. 44ff: Sic michi quidem prout et de armonia si quis et lira quoque atque fidibus eundem sermonem hunc dicat, quoniam autem armonia invisibile et incorporeum et optimum quid atque divinum est in aptata lira, ipsa vero lira et corde corpora et corporea necnon composita atque terrestria sunt et mortalitati cognata. Ubi ergo vel confringat quis liram aut secet seu rumpat fides, si quis instat eidem racioni quemadmodum tu, quoniam necesse superesse armoniam illam et minime disperiisse—nulla quippe possibilitas erit liram adhuc disruptis fidibus atque fides mortali forme similes esse, armoniam vero perire numini et immortali similem in nativitate et coortivam, priorem mortali disperdi—immo dicat necesse adhuc alicubi esse ipsam armoniam, et prius ligna atque cordas putrefieri quam quid ipsam pati—et enim igitur, o Socrate, opinor ego quidem et ipsum te hoc concepisse, quoniam tale quid precipue suspicamur animam esse, quemadmodum intensi corporis nostri et concreti a fervido et algido et arido atque liquenti et talium quorumdam, mixtionem esse necnon armoniam ipsorum horum animam nostram, ex quo hec metrice et bene misceantur ad invicem—si ergo contingat animam esse armoniam quamdam, liquet quando remittatur corpus nostrum preter modum vel subiciatur ab egritudinibus atque aliis malis, animam quoque necesse statim est deperire, et cum sit divinissima, quemadmodum cetere armonie que in sonis et in artificum operibus omnibus, reliquias autem corporis cuiusque multo tempore permanere, donec comburantur vel putrefiant; contuere igitur ad hunc sermonem quid dicemus, si quis probet crasim animam eorum que in corpore in eo quod vocatur letum primam interire. (The point is this, one could apply the same argument to the attunement of the lyre and its strings: one could say that the attunement in the tuned lyre is something invisible, incorporeal, lovely, and divine; whereas the strings are bodies, corporeal, composite, earthy, and akin to all that is mortal. Now suppose the lyre came to be smashed or split, or its strings to be broken: somebody might adopt your argument and insist that the attunement had not been destroyed, but must still exist: for, he would argue, it is impossible for such mortal objects as the lyre with its strings broken, and the strings themselves, still to exist, and yet for the attunement to have perished; how could these things of such close kinship with the divine and the immortal perish sooner than that mortal object? No, he would say: the attunement must still exist somewhere, and before anything happens to it the wooden frame and the strings will have rotted away. And in point of fact I fancy that you yourself are well aware, Socrates, that we mostly hold a view of this sort about the soul: we regard the body as held together in a state of tension by the hot, the cold, the dry and the moist, and so forth, and the soul as the blending or attunement of these in the right and due proportion. Now if the soul really is a kind of attunement, plainly when our body is unduly relaxed or tautened by sickness or some other trouble, the soul, for all its divine nature, is bound forthwith to be destroyed, just as much as any other attunement or adjustment—in musical notes, for instance, or in a craftsman's product; whereas the bodily remains will last for a considerable time, until they are burnt or rot away. So see what answer you can find for us to this

to mind and substantiates the inner, invisible realities of harmony and composition. Its outer form is also abstract in some respects. As a recognizable object its linear, economical design seems to geometricize the inner substance—the invisible harmony—it represents.[21]

The visible *lira* represented a society of invisible things. It represented, for Plato, harmony, a composite of parts brought, in an unseen way, together. All parts functioned accordingly to their properties, simultaneously, as a unity. Harmony, in the *Phaedo*, is not ambiguous,[22] but has firmness, implies presence of will, a tension and intentional consciousness, just as the strings of the *lira* are multiplex but set in consciously-derived intervals and with exact degrees of tension.[23] Plato discusses all of these facets in a meticulous and differentiated progression of thought. Simultaneously, when one sees the image of the *lira*, the viewer envisions a mental image of harmony, which is invisible, conceptual, and composed of many distinct facets. The representational value of this image, as well as the simultaneous nature of its comprehensibility are important, and were, at the time of the Latin *Phaedo*'s reception, new. Medieval intellectual civilization of course was only too well acquainted with the substitution of words for alternative meanings. The allegorical sense of interpretation is based upon precisely this substitution. The novelty, presented here for the first time to its thirteenth-century Latin-reading audience, was the instantaneously-perceived substitution of an image for

---

argument, which insists that the soul, being a blending of the bodily constituents, is the first thing to perish in what is called death.) The use of the word *attunement* in the English version diminishes the composite quality of harmony, which is the essential kernel of this long and important passage. It has been quoted in full since the *Plato latinus* edition of the *Phaedo* may not be readily accessible, and because differences in vocabulary and interpretation between the two versions are significant. Furthermore, attention should be drawn at this point to Plato's emphasis on the body as a composite. Grosseteste, as well, when referring to body, mentions Plato, but without stating the particular work he has in mind: Plato autem nichil posuit extra celum neque scilicet corpus neque ydeas. Ydee enim, licet non sint sub celo, non sunt extra quia nusquam sunt, cum non sint localia. Ille inquantum Plato dicit infinitum in sensibilibus et ydeis. Ydee namque sunt raciones rerum infinite et sapiencia infinita in mente divina que sapiencia est principium omnium effectuum...Inpari enim per se accidit indivisibilitas et potencia activa. Puto autem Platonem dicere Magnum possibilitatem forme extendendi se replicacione sui infinita; Parvum vero possibilitatem forme congregandi se et secum materiam. (Grosseteste, *Commentarius in VIII Libros Physicorum Aristotelis*, p. 55.)

[21] The passage:...mixtionem esse necnon armoniam ipsorum horum animam nostram, ex quo hec metrice et bene misceantur ad invicem—si ergo contingat animam esse armoniam quamdam, liquet quando remittatur corpus nostrum preter modum vel subiciatur ab egritudinibus atque aliis malis...from the above context, is especially significant for a concept of harmony as simultaneous composite. The entire passage also contains key words for a music theoretical vocabulary: *armonia*, *lira*, *metrice*, *modus*, *sonus* (Cf. 86. c. 8, p. 45).

[22] Harmony is not ambiguous (88. d. 1, p. 48): Nam quam plurimum probabilis existens quem Socrates dixit sermonem, nunc in ambiguitatem delapsus est. Firmiter siquidem michi sermo iste tenetur et nunc et semper, armoniam quamdam nostrum esse animam, et quemadmodum in memoriam reduxit me dictus; nam et ipsi michi hec prius videbantur.

[23] See van Deusen, "The Image of the Harp."

multiplex significance. The *lira* was a spontaneous demonstration which required neither verbal explanation nor logical syllogism. As geometric designs abstracted and demonstrated material, so this simple picture displayed a highly complex and invisibly abstract concept for a viewer to apprehend at a glance.[24]

Furthermore, the *Phaedo* exposes an additional harmony between simultaneous event, occurring at once in time, and continuous ongoing process. This interplay between the simultaneous occurrence and successive process is not particularly emphasized in the English translation of the *Phaedo*, as it was in its twelfth-century Latin translation. The subject area of longitudinal continuity can be recognized by expressions such as *et hec ad illius exemplar ducimus*,[25] by phrases which imply governance such as *quemadmodum regere quidem et ducere*,[26] and further by the idea of being

---

[24] Cf. 92. a. 16, p. 52:...armoniam nempe esse compositam rem, animamque armoniam quam ex eis que secundum corpus intensa sunt componi; haut enim alicubi demonstrabitur temet inquiente quatinus prius armoniam compositam, ante quam ista sint ex quibus oportuit illam constare; vel recipis?...Scias igitur quia non hec tibi contingit dicere, quociens inquis esse animam prius eciam quam in hominis formamque et corpus introeat, esse sane illam constantem ex eis que nondum sunt? Non enim armonia quoque tibi tale est cui assimilas, atqui prius et lira et fides et soni adhuc anarmosti existentes fiunt, novissime certe cunctorum componitur armonia, et primo interit. Hec itaque racio illi quo pacto concinet?

[25] Cf. 76. d. 8, p. 32: Ergo igitur sic nobis habet, o Simmia? Si vero sunt que ruminamus semper, pulcrum quid et bonum et omnis huiusmodi essencia, et ad hanc que ex sensibus cuncta retorquemus, existentem prius adinvenientes quod nostra sit, et hec ad illius exemplar ducimus, necesse, ita ut eciam hec sunt, sic eciam nostram animam esse et ante quam gignamur nos; si vero minime sunt hec, aliter quidem sermo hic dictus erit? Itaque sic se habet, et eque necessarium hec quidem esse, et nostras animas prius quam gigneremur, et si non hec, neque illa? Compare *ad illius exemplar ducimus* with *seducitur* (Cf. 79. c. 10, p. 36): Nonne igitur et hoc pridem diximus, quoniam anima, cum corpore utitur ad examinandum quid aut per visum seu per auditum vel per alium aliquem sensum—hoc enim est per corpus, per sensum speculari quid—quociens quidem allicitur a corpore in ea que numquam secundum idem se habent, et ipsa seducitur et turbatur et singultit velut deebriata, quemadmodum talibus contacta? Petrarch, in his *Secretum* expresses just this idea of distraction, confusion, and seduction brought about by too many sense impressions:...of a truth the countless forms and images of things visible, that one by one are brought into the soul by the senses of the body, gather there in the inner center of the mass, and the soul, not being akin to these or capable of learning them, they weigh it down and overwhelm it with their contrariety. Hence that plague of too many impressions tears apart and wounds the thinking faculty of the soul, and with its fatal, distracting complexity bars the way of clear meditation, whereby it would mount up to the threshold of the one chief good (*Secretum: Petrarch's Secret or The Soul's Conflict with Passion. Three Dialogues between Himself and S. Augustine*, [trans. W. H. Draper, London, 1911, repr. 1975] p. 43).

[26] 79. e. 31, pp. 36-7: Contemplare eciam sic quoniam, cum in eodem fuerint anima et corpus, hoc vero servire et subici natura precepit, huic vero regere et dominari; et secundum hoc iterum utrum tibi videtur simile divino esse et utrum mortali? Seu non videtur tibi hoc quidem divinum, quemadmodum regere quidem et ducere aptum esse, mortale vero regi et servire? The concept of *ductus/ducere*, important for music theory of this period, implying not only rulership, but a longitudinal course, has a dominant place in this as well as several other passages dealing with governance. The concept is missing in the English translation of this passage: Now consider a further point. When soul and body are conjoined, nature prescribes that the latter should be slave and subject, the former master and ruler. Which of

drawn in two directions such as *ducens oportere contraire*.[27] The *Phaedo* presents a harmonization between single, describable, particular events and the continuous time-lapse of conduct, or *ductus*, be it of a reign or the *ductus* of one's personal life. Both are balanced aspects of measured time.

Every operation could be divided into single moments.[28] Each unit showed a recognizable format—in the language of the Latin *Phaedo*, *passiones* or modes. All formed together, in orderly progression, a composition.[29] All of these principal ideas, actually the key aspects of the *Phaedo*, could best be demonstrated by the science of harmonics, that is, music, and writers on music did exactly this. They exemplified the most important ideas contained in the *Phaedo* in writing concerning a discipline which was especially appropriate to the *Phaedo*'s subject matter, harmony. The expressions discussed as basic to the *Phaedo* appear with frequency and emphasis in writing concerning music, especially during the period when the *Phaedo* would have had its greatest effect.

First, music exemplified both the invisible, inaudible, and connecting force of harmony as well as the audible, sensually-apprehendable phenomenon. The concept, with all of its nuances, as explained in the *Phaedo*, became more comprehensible when exemplified by music. Conversely, the concept of harmony, developed in the *Phaedo*, was a new one, and as such greatly influenced its musical counterpart. The *Phaedo*'s harmony is a simultaneous harmony. The image of the *lira*-harp as a symbol shows conclusively that the represented composite occurs at one time. The composition, made of parts, achieves together, and at once, a harmony. This harmony is not a successive process of disparate tones brought into a modulated relationship. There is, to be sure, a history of this term in the Middle Ages, but it is used as a concept to describe successive process, not a simultaneous composite. The *Phaedo* articulates and emphasizes the concept of simultaneous harmony; it gives, in fact, primary

---

the two, in your judgement, does that suggest as being like the divine, and which like the mortal? Don't you think it naturally belongs to the divine to rule and lead, and to the mortal to be ruled and subjected? (p. 83).

[27] Cf. 83. b. 13, p. 41: Huic tamen solucioni haut dignum ducens oportere contraire...cf. Petrarch, *Secretum* (trans. Draper, p. 25,): When all these passions are extinguished, then, and not until then will desire be full and free. For when the soul uplifted on one side to heaven by its own nobility, and on the other dragged down to earth by the weight of the flesh and the seductions of the world, so that it both desires to rise and also to sink at the one and the same time, then, drawn contrary ways, you find you arrive nowhither.

[28] *Modus* and *passio* are translations of the Greek *pathos*, and can be regarded as equivalent, interchangeable expressions, hence have essential aspects in common throughout the thirteenth century. *Modi* and *passiones* have separation and distinction, their recognizable shapes and formats indicate types, and they are expressed through time.

[29] A study of the medieval tradition of harmony carried out here would be too cumbersome. The concept, informed primarily by Martianus Capella, Johannes Scotus, and developed by Aurelianus and Regino of Pruem primarily accommodates a linear, successive, melodic coalition of disparate tones.

attention to it at each level of its discourse, and clarifies it as occurring during a certain moment in time. Not only do music theorists begin to discuss simultaneously-sounding tones within an ordered contrapuntal discourse during the period of the *Phaedo*'s reception, but there is, in actual practice, music constructed of simultaneously-sounding voices, or polyphonic music.

Furthermore, the *Phaedo* singles out, clarifies, and explains in great detail, a concept of composition. The concept is related to harmony, in that it is the object of a harmonious state: *armoniam nempe esse compositam rem*. Finally, not only are composites accounted for in the *Phaedo*, but the concept of ongoing, continuous *ductus* is explained as imparting a sense of measured time. Both concepts, *ductus* and composition, had no precedent in music writing before the period of the *Phaedo*'s dissemination. Both are significant, not only in writing about music but in music itself, concurrently with the *Phaedo*'s influence. (Example[30])

In reading the Latin *Phaedo*, one is confronted by the question, what does this particular language do to this material? If one has been acquainted with both Greek and English versions of the dialogue, and comes to the work with well-defined ideas of what it is about based on the transmission of the work in other languages, one is made immediately aware of a selective process; that the translator himself is constantly working with his own associations, bringing to the work the context of his own thought constructs, and building up a vocabulary of terms which sometimes lacks the associations of comparable English terms, and can, on the other hand, be far richer. The Latin language, in particular, has the means to channel diverse, very comprehensive, and highly abstract concepts into one definite meaning which, because of its limitation, can be more easily understood. By selecting a certain Latin term, the translator places that term in a collection of terms and a historical sequence of uses for that term. The term acquires a context and adheres, by its use, to a cluster of similar associative contexts. Examples of this include harmony, *ductus*, and *modus*. All three of these were indispensable to writers on music, not only in the thirteenth century, but previously as well. Although all three had had significant terminological pasts, the Latin *Phaedo* either radically changed the direction of their significance, as in the case of harmony, or brought new significance to their usage, as in the case of *ductus* and *modus*.

---

[30] The principal collections of "Notre-dame polyphony" are the manuscripts Florence, Biblioteca Mediceo-Laurenziana, Pluteus 29, 1 and the two Wolfenbuettel Herzog-August Bibliothek sources, 628 and 1099. This composition is a *conductus* from the manuscript, Florence, Biblioteca Mediceo-Laurenziana, Pl. 29,1, f. 210r: *Mundus hic a crimine*, as exemplification of composite harmony. *Simultaneity* of musical tones indicated by notational *figurae* is observable, whether or not one is able to read music notation.

The art historian Gombrich has suggested that philosophical ideas affect an intellectual culture almost as if by remote control.[31] Demonic carriers of spiritual essences was one explanation for the transfer of ideas in the Middle Ages.[32] These important new musical concepts and new uses for old ideas, however, had origins that can be found and explained: namely, the impact of the first Latin translation of a Platonic work in almost eight hundred years, the *Phaedo*, which was received and read by a concentrated, localized group of people at the University of Paris. Its primary points were interpreted musically, as was reasonable, since the *Phaedo* is about music.

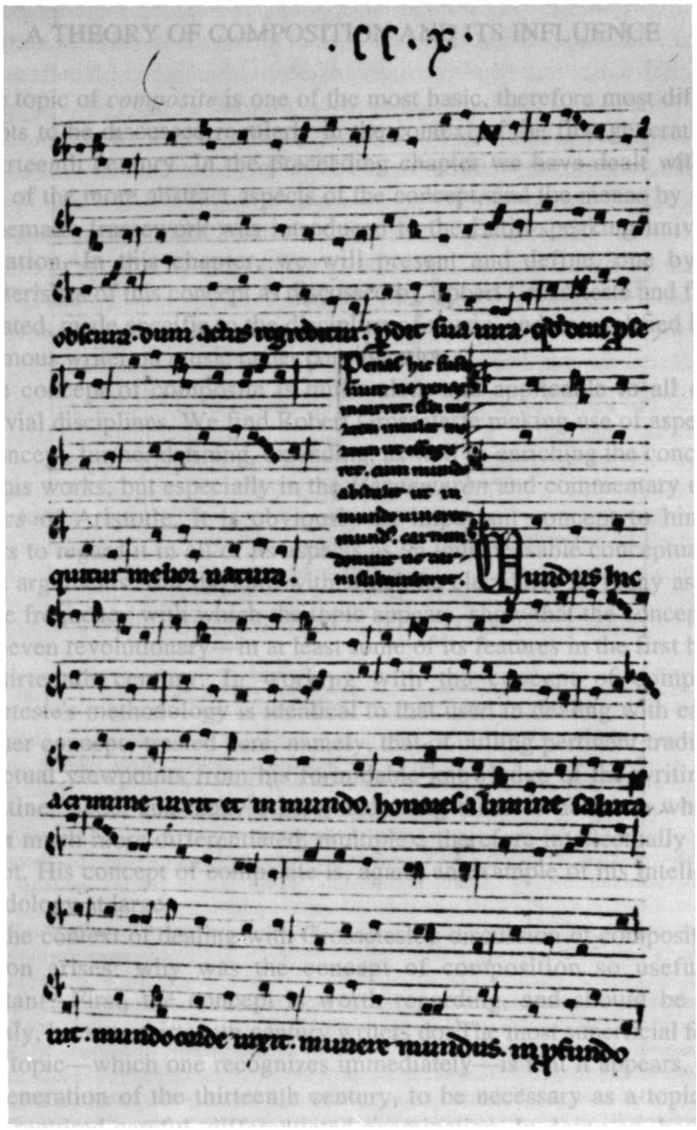
---

[31] Cf. Ernst H. Gombrich, *Symbolic Images: Studies in the Art of the Renaissance* II (London, 1972), p. 235, n. 125: We still know too little about the way in which philosophical ideas percolate, the way in which they are first distilled into slogans which in turn direct the attitude of men towards certain values and standards. It is in this way, so it seems, that the philosopher influences the actions of his contemporaries by a process, almost of remote control.

[32] For background and discussion of the mediating, communicative power and office of demons, see Michael J. B. Allen, *The Platonism of Marsilio Ficino: A Study of His Phaedrus Commentary, its Sources and Genesis* (Berkeley, 1984), especially pp. 25-28.

BETWEEN PP. 126 AND 127

Florence, Biblioteca Mediceo-Laurenziana Pluteo 29, 1 f. 210n: *Mundus hic a crimine* (conductus)



CHAPTER EIGHT

A THEORY OF COMPOSITION AND ITS INFLUENCE

The topic of *composite* is one of the most basic, therefore most difficult, concepts to be discussed regularly in the context of the first generation of the thirteenth century. In the preceeding chapter we have dealt with one source of the more abstract aspects of the concept, and the means by which its schematic framework was introduced to the Latin-speaking university civilization. In this chapter, we will present and define, one by one, characteristics of this concept as discussed by Robert Grosseteste and further elucidated, made specific to the discipline of music, and exemplified by the anonymous writer on music under consideration.

The concept of composite is multivalent and applicable to all of the quadrivial disciplines. We find Robert Grosseteste making use of aspects of this concept, further defining, extending, as well as enriching the concept in all of his works, but especially in the *Hexaemeron* and commentary on the *Physics* of Aristotle. It is obviously an important concept to him. He appears to regard it in all of its aspects as an indispensable conceptual tool for his arguments. But the care with which he elucidates its many aspects, and the frequency with which the topic appears, show that the concept was new—even revolutionary—in at least some of its features in the first half of the thirteenth century. In working with the concept of composite, Grosseteste's methodology is identical to that used in dealing with each of the other concepts treated here, namely, that of culling pertinent traditional conceptual viewpoints from his formidable knowledge of the writings of Augustine, Bede, and many others, and using these as bases on which to build a much more differentiated, multiplex, therefore intellectually richer concept. His concept of composite is, again, an example of his intellectual methodology at large.

In the context of dealing with Grosseteste's discussion of composite, the question arises: why was the concept of composition so useful and important? First, the concept is worth regarding, and should be taken seriously, because thirteenth-century writers do. The most superficial feature of the topic—which one recognizes immediately—is that it appears, in the first generation of the thirteenth century, to be necessary as a topic; one which required careful, differentiated examination. In doing so, however, several subjects emerge, which will either continue to have currency as important topics or will gradually become so self-evident as to be taken for granted for centuries to come. Let us consider these aspects, one by one, as they are discussed in Grosseteste's writing, reflecting on the sources on

which he builds, and considering, finally, the exemplary use made of the concept by the thirteenth-century anonymous English writer on music.

As we have seen in the *Phaedo* of Plato, the concept of composite for Robert Grosseteste was a material concept. Unformed material could be formed. There were important analogies in the natures, manners with which one could work, and final products between substantial, concrete material and intellectual material. Grosseteste's source for a material concept is, in part, Bede, who sets forth a concept of material aggregate.[1] Material contained within itself the force or energy to clump, to come in contact, to aggregate, to conglomerate.[2] One notes an important equivalence between concrete, substantial, quantifiable material and intellectual or spiritual material. We find this, in one case as a topos, in two specific examples. First, is the topos of an aggregate or thicket of material to be found in the biblical scriptures. The "opacity of material" which is the sum total of biblical texts is mentioned by Grosseteste in the following example:

> Ex his itaque omnibus agregatis colligit quod, sine magistro ductore et previo non patet, in opacitatem sacre Scripture introgressio; inculcat quoque adhuc eiusdem rei improbacionem per locum a maiori: quia cetere artes, non solum liberales sed eciam mechanice, non possunt haberi sine doctore, quanto magis nec ista que est omnium arcium complexiva et intellectu profundissima.

The "opacity" of sacred scriptures is likened to an "aggregate coming together" (*omnibus agregatis colligit*).[3] The point, it appears, of this

---

[1] Bede, *Hexaemeron* I (*PL*, XCI, 13D-14A); see also R. C. Dales, "Marius 'On the Elements' and the Twelfth-Century Science of Matter," *Viator* 3 (1972), pp. 214ff.

[2] Grosseteste's *Hexaemeron* commentary, in particular, is filled with nuances of meaning, and an entire vocabulary of terms basically signifying conglomeration, such as: *mischum, congregatur, congregacionem, collectio, convocantur*, as, for example: *μισχομ: mischum,* nuncupare solent hii qui vocabulorum composicionibus operam dederunt, et hoc vim seminis optinet (*Hexaemeron*, p. 148); ...et tota ecclesia, ex militante et triumphante in unam triumphantem collecta, ab omnibus temptacionis illius fluctibus omnino erit libera ...sic et ecclesia collecta est de fluxu populorum...a fluxu per varias concupiscentias desiccata...Ecclesie autem sic collecte congruunt maris proprietates (*Hexaemeron*, pp. 133f.). Vel aque congregantur in locum unum, cum cun[c]te gentes convocantur in legis naturalis observacionem (*Hexaemeron*, p. 135). All of the terms expressing aggregation carry the implication, often openly articulated, of an internal inclination or *appetite* to aggregate:...secundum speciem sive materialiter, vis inclinativa ad congregacionem, et terre, ablatis aquis, ad germinacionem (*Hexaemeron*, p. 123).

[3] Grossteste, *Hexaemeron*, p. 18. The passage is also of interest because it relates the liberal to mechanical arts. In another, related, context, Grosseteste points out that all science and knowledge come together in scripture, affecting the hidden spiritual interior: quam precipue congruit sacerdoti scientia et intelligentia Scripture; et ut non sit sacerdos contentus sola rusticitate...et quia posset obici quod multi scierunt sacram Scripturam sine doctrina, utpote apostoli, respondet ad hoc quod Spiritus Sanctus in eis supplebat interiori instinctu quod alii solent recipere per exteriorem doctrinam et exercitacionem. Et quia posset quis dicere quod theologia esset sine instructore addiscibilis, tanquam scientia aliqua facilis, et precipue viro in secularibus literis excercitato, ostendit econtra, quomodo sacre Scripture sensus occultus sit et signatus; cuius non modicum difficilis sit aditus (*Hexaemeron*, p. 18).

passage is not only that the scriptures are "opaque," therefore difficult to understand, but that the scriptures offer an enormous repository of material, as a thicket or a dense forest (*silva*), the second of our medieval analogies to conglomerated material. The analogy of scriptures to an opaque thicket of material was a topos by the time of Grosseteste's writing, so would have been familiar to his medieval readership.[4]

Whence came this analogy of intellectual material to a thicket or forest? The rationality for this analogy originates in the translation of the Greek *hyle* to *silva*, whereby intellectual-spiritual material (*hyle*) becomes, by its translation, the Latin *silva*, a forest of trees. We find this equivalence expressly made in both Chalcidius' translation of, and commentary on the *Timaeus* of Plato: "Necessitatem porro nunc appellat hylen, quam nos Latine silvam possumus nominare, ex qua est rerum universitas eademque patibilis natura..."[5]

Silva contains an "appetite to aggregate." A forest is a whole clump of trees. But *silva* in the *Timaeus* is not enclosed, is not a "body" (*corpus*):

> Quibus ita decursis sequitur ut, an corpus silva sit, consideremus. Neque corpus neque incorporeum quiddam posse dici simpliciter puto, sed tam corpus quam incorporeum possibilitate; quippe quod proprie dicitur corpus ex silva constat et qualitate,...minime ergo corpus est. Deinde nullum corpus sine qualitate, silva autem per se sine qualitate: non igitur corpus est. Quid quod omne corpus habet figuram et silvae iuxta naturam suam nulla figura est? Non ergo corpus. Deinde omne corpus finitum ac determinatum est, silva autem infinita et minime determinata: non ergo corpus.[6]

Silva—a stockpile of material, a clump, or thicket of trees, an abstract pile of limitless possibilities—was without characteristics, enclosure, or containment. In short, it was very difficult, if not impossible, to identify *silva*, as it lacked qualities. *Corpus*, taken from the stockpile of available material, on the other hand, was finite, determined, therefore could be categorized. Since essential material characteristics were present in a corpus,

---

[4] Cf. Grosseteste, *De decem mandatis*, p. 4: Grosseteste states that the ten commandments briefly and succinctly indicate a direction for the "wayfaring man" to follow through the entire collection of the scriptures which resembles a dense forest full of branches, that is, a thicket. Opacity, of course, has no individualizing features, hence the obscurity. One medieval reason for relating the topos of "opacity of the sacred scriptures" to *silva* is, again, that a rational basis for this connection was set up in the *Timaeus*. God, himself, operator and maker of all, is subjected to neither genus nor characteristic subject and thus able to create material which is without quality: Denique ut deus, qui primitus operatur ac facit, neque genus est neque ulli subiacet generi, sic etiam quod primitus patitur, id est silva, origo altera, neque genus est neque ulli subiacet generi; quapropter, cum sit origo, nihil antiquius ea mente concipiendum est. Quae cum ita sint, corpus sentitur, silva sensibilis non est: silva igitur non erit corpus (*Timaeus a Calcidio translatus commentarioque instructus*, ed. J. H. Waszink, 315.20-316.1).

[5] Plato, *Timaeus*, 273.15-16; cf. Grosseteste, *Hexaemeron*, p. 63.

[6] *Timaeus*, 314.17-315.4.

passiones or modes could, at diverse times, be sustained without destroying the essence of the *corpus*.[7] Furthermore, *corpus* is composite.[8]

We should retrace our steps because of the importance of the basic concepts set forth here. *Silva*, as an opaque thicket of material, either physical or conceptual, is without individual delineation. This is suggested by the use of opaqueness as a descriptive qualification. *Corpus*, taken from the thicket or conglomerate of material is characteristic, identifiable, formed, and composite, that is, composed of parts. Two features thus come into the discussion; first, that a determining will is at work to extract, form, and to delimit a composite *corpus* from the generality of substance, and secondly, that the *corpus* is identified by its *figurae*, which are characteristic features either combined into, or themselves constituting parts.[9] The containing force of the *corpus* is sufficient to accommodate conflicting, contrary *passiones* or *modi*, composed of *figurae*.[10] It is vital to the consideration of the entire complex of ideas to discuss each of these aspects in detail, and Plato does this.[11]

Grosseteste, in turn, especially in his Genesis commentary, as well as in his commentary on Aristotle's *Physica*, develops and enriches a concept of primordial aggregative material in the following directions. First, one finds a concept of "pre-existent material" implied through negation:

> nulla adhuc preexistente potencia materiali passiva, dictum est: "Creavit Deus;" ubi vero exprimenda erat solummodo materialis potencia passiva, receptiva solum, cum potencia Creatoris activa, dictum est: "Dixit Deus: Fiat;" ubi vero exprimenda erat potencia in materia, non passiva et receptiva solum, sed eciam inclinativa et motiva ad actum essendi, dictum est: "Dixit Deus: Congregentur, germinet, producat." Materia namque prima et spiritalis natura, designate per terram et celum in principio creata, ex nichilo facte sunt; nec precessit eas potencia, nisi sola activa potencia creatrix.[12]

---

[7] *Timaeus*, 315.4-8 (To overlap with the above context): Deinde omne corpus finitum ac determinatum est, silva autem infinita et minime determinata: non ergo corpus. Item omne genus corporis sub categoricam redigitur appellationem. Dicimus enim corpus essentiam, utpote quod diversis temporibus contrarias sustineat passiones et in quo alterum ex duobus contrariis inveniatur necesse est. At diverse times, contrary passiones—or modes—could be sustained.

[8] *Timaeus*, 316.1-3: Eodemque modo silva simplex res est et incomposita, corpus neque simplex et compositum...

[9] *Timaeus*, 315.2-3: Quid quod omne corpus habet figuram...

[10] The equivalence and importance of *passiones=modi* is discussed above in "Change in a Concept of Mode."

[11] Chalcidius' commentary to the passages quoted above gave a medieval Latin reading public of the earlier medieval period, before the translational activities of the early thirteenth century, access to at least some additional relevant discussion in both Aristotle's and Plotinus' writings. See the copious notes in the editions of the passages quoted above.

[12] Grosseteste, *Hexaemeron*, p. 122. The concept is frequently mentioned and explained in Grosseteste's commentary on the *Physica*: Nec potest hec egressio esse de potencia nisi forme accidentalis preexistentis replicative (aut replicata) in se minus replicata reversione

Second, Grosseteste makes two important equivalences, that of material and sound, or "sonorous material," and material and time, or time as inchoate material. Both sonorous and temporal materials could be formed. *Vox*, for example, is the result of sonorous material. When the possibility of time as material can be admitted and understood, then material can be seen to participate in time measure: "Cum igitur Deus sit eternus, mundus quoque et motus et tempus sint temporales, tempus vero et eternitas non sint eiusdem generis mensure, non habet in hiis locum illa regula de cause et causati coexistencia. Habet autem locum, ut dictum est, cum causa et causatum participant eadem mensura."[13]

Third, there is an implication, whenever Grosseteste mentions and elaborates upon his concept of conglutination, aggregate, or a clumping together of material, that individual parts are also present and subject to identification, as, for example, in the following conglomerate: "...'et copulata Christi glutino,' id est unitiva virtute; quam necessitudinem 'non utilitas' propria, 'non corporum presentia, non' decipiens et deliniens 'adulacio sed Dei timor et divinarum Scripturarum studia conciliant.'"[14] The implication is that the aggregate, or composite is, itself, a self-contained object, as Grosseteste states, a *res individua*, *res permanens finita.*

> Conveniunt autem in hoc quod semper accepit aliud et aliud, et totum acceptum semper finitum est. Tamen unumquodque acceptum semper alterum est a prius accepto, unde ipsum quod simpliciter dicitur infinitum non potest esse individua signata, quod omnis res individua signata finita est. Differunt autem quia acceptum infinitum in divisione magnitudinis est res permanens finita.[15]

Conveniunt, *acceptum*, *individua*, *res individua*, and *res permanens* are the related concepts, in context, to be considered here. Parts convene and are accepted into an individual, stable, whole object. Describing both the convening and accepting processes is not the thrust of Grosseteste's argument here; rather, it is the composite as *res*. Grosseteste, especially throughout his *Hexaemeron* commentary, finds many examples for the same important concept. As a self-contained aggregate of individual parts, finding society and acceptance, so that a stable, even permanent, and artful fusion

---

quam enim aliter fieret ex uno aliud; et econoverso, nullo novo creato nec preexistente quod fit (pp. 16f.).

[13] Grosseteste, *Hexaemeron*:...nec instans quod tempus inchoat est continuacio preteriti ad futurum, sed solum futuri inicium...Mundus enim, quia compositus est, factum esse se clamat (p. 62).

[14] Grosseteste, *Hexaemeron*, p. 19; cf. p. 49: Ex quibus tribus unionibus videtur aggregari unum quo dicitur Christus integer unus; p. 50: ...conglutinare videtur in se unum substancie Patris et Filii et Spiritus Sancti...Unde et ab hoc uno sic aggregato et unito, tamquam a subiecto, potest esse descensus ordinabilis in trinitatem...et corpus eius quod est ecclesia...

[15] Grosseteste, *Comm. in Phys.*, pp. 66f. The "convening" or "congregating" is a process of intellection.

into a totality is formed, Grosseteste cites the church, present on earth now, and living in paradise in the future, as a totality of individuals, connected together.[16] What unites this collected body, and produces its totality is a mystical bond; all of the parts share a spontaneous vision of Christ, since each individual part beholds God with one spirit, and with a clear intelligence completely denuded of fantasy: "...cum ipsa racionalis cognicio assurgit in contemplacionem Trinitatis per intelligenciam a fantasmatibus denudatam..."[17]

But what about the abstract singular parts, each with differentiating characteristics, which combine to form a composite? If a mystical, magnetic force convenes parts into an objective whole,[18] what is the nature of these component parts? Grosseteste answers, they are *centones*, translated as *puncta*:

> *Kentô*,...idem est quod 'pungo,' unde dicitur 'cento, centonis' idem quod punctus vel punctatio...Virgiliocentonas autem composuit Proba, uxor Adelfi. Hysidorus autem dicit: "Centones apud gramaticos vocari solent qui de carminibus Homeri seu Virgilii ad propria opera more centenario ex multis hinc inde compositis in unum sarciunt corpus ad facultatem cuiusque materie. Denique Proba, uxor Adelfi, centonem ex Virgilio de fabrica mundi et ewangeliis plenissime expressit, materia composita secundum versus, et versibus secundum materiam concinnatis.[19]

In this terse explanation of *centones*, the terms mentioned, the succession of concepts, and the persons, both mentioned and alluded to, are important. Expressions and terms such as *hunc centonem composuit*, *centimetrum=centonem*, *versus*, and *in eius modi centonibus*, as well as *res* constitute a conceptual basis for producing written compositions, provide an origin for such a basis, and give specific examples which unite Latin literary accomplishment and form—namely, Virgil's—with Christian content and

[16] Grosseteste, *Hexaemeron*, pp. 3llf. Grosseteste's paradise model is an extension of Augustine's.

[17] Grosseteste, *Hexaemeron*, p. 96.

[18] Grosseteste's "whole" is *secundum materiam concinnatis*: material "harmonized," or "brought together." Cf. Grosseteste, *Hexaemeron*, p. 34.

[19] Grosseteste, *Hexaemeron*, p. 34, cf. Isidore of Seville, *Orig*. I, 39 (38); *De Hist. scriptoribus Eccles*. cap. 5: Proba, uxor Adelphii proconsulis, femina inter viros ecclesiasticos idcirco posita sola, pro eo quod in laude Christi versata est, componens centonem de Christo Virgilianis coaptatum versiculis. Cuius quidem non miramur studium, sed laudamus ingenium. Quod tamen opusculum legitur inter apocryphas Scripturas insertum. Grosseteste is referring to the *centones Probae* (cf. *Poetae christiani minores*, I[*CSEL* 16.1-513], ed. Carolus Schenke, which summarizes the transmission of the *centones*: the term/concept was of sufficient importance to be mentioned and explained by Pope Gelasius (492-496), Jerome, and Isidore; it occurs in Prosper's *Epigrammata*, is mentioned by Adelard of Bath, Hildebert Turonensis, and in manuscripts from Saint-Victor.) According to oft-repeated accounts, the *centones* were written in 379 by Proba, the wife of a Roman proconsul, in imitation of Virgil's compositional method of placing together single, complete, self-contained lines or *versus*. It is the compositional method used in the *Aenead*, which was applied to specifically Christian subject matter. See edition of Valeria Faltonia Proba, *Centonum poetria*, *PL* XIV.802-816.

tradition. It appears to have been a highly influential combination, hence, the sources as well as the concept itself, of *cento*, were well-known in the period directly preceeding Grosseteste's discussion of the topic. *Centones* conjoined became a *res*, a *corpus*, a totality, according to Isidore, by the "conjoiner's ingenuity." For Grosseteste, however, the conjoiner or composer ruminated, masticated, and digested his material to form a *corpus*, a composition.[20]

The question arises: what determined the order of the *centones*? *Centones* provided energy for the forming of a narrative continuity.[21] What factors determined how, in what order, and according to which rules, the *centones* would be placed together? In other words, who chose? It appears that while this particular question was not asked in the earlier medieval period, it is of great concern, both to Grosseteste and to the anonymous writer on music. In a sense, the *ordo* in which *centones* are placed is the mystical aspect of the composition. The question receives a cryptic answer in contexts in which the term, *ordo*, is used. Indeed *centones*, or modular parts, become significant, meaningful composites by means of order. In this intellectual landscape where the most important concept is explained in a much-quoted passage by Isidore of Seville, the concept of *ordo* is the principle contribution of the early thirteenth century—and of Grosseteste—to a theory of composition. It occurs in the following contexts and with the following nuances of meaning: *ordo* signifies organization in contingency, achieved either by means of sequence and procession (successive order) or by means of conglomeration (simultaneous order). Narration is order which is perceived as successive and involves both time and motion.[22] Simultaneous

[20] The parts actually vivify the whole. This entire complex of ideas both influences and permeates resurrection conceptualization, in that the parts (*centones*) of the body (*corpus*) must be recombined in order by what can be described only as a digestive process. Material resurrection of the body depends on combination, reassemblage, not on transformation. Although this is a topic for a separate study, the underlying conceptual basis for both the combinatory process described above, and for an emerging doctrine concerning the resurrection of the body, is the same. Robert Grosseteste more than once brings the topic of the reviving of the dead into the conceptual field of the expression *pro modulo*. (See also Grosseteste, *Hexaemeron*, p. 76: Quapropter, ut participet omni situ sibi possibili,... ut sic assimuletur conditori participans pro modulo suo omni sibi possibili.) The comparison of the compositional process to chewing, swallowing, and digesting is one with a tradition in use long enough by the thirteenth century to be considered a topos. Cf. Mary Carruthers, *The Book of Memory: A Study of Memory in Medieval Culture* (Cambridge, 1992), especially pp. 164f.

[21] Cf. *Hexaemeron*, p. 19: Ordo autem construccionis sequentium...sed pleraque subsequentium verborum habent intellectum non valde dilucidum.

[22] Qui tamen concedunt ex illo loco incipere hystoriam, id est proprie rerum gestarum narracionem...(Grosseteste, *Hexaemeron*, p. 311). The successive/simultaneous comparison is a fundamental one, and occurs as a consideration in many contexts which involve motion and time, such as this: Dicitur enim principium in successione temporis et principium in ordine numerali, et principium in mole et magnitudine, principium quoque in mocione (*Hexaemeron*, pp. 64f.), and In principio quoque ordinis numeralis creata erant...sicut res sunt priores et

order, to use Grosseteste's expression, convenes in a quiet habitude.[23] *Ordo*, by implication is achieved by construction. Both the successive *ordo* of narration and the established simultaneous *ordo* are constructed *ordines*.[24] Constructed *ordines*—either imparting a sense of movement from beginning to end, or at once, in one place—are inherently composites. The opposite of a composite is *incomposita*, which is an aggregate lacking in *ordo*:

> Incomposita vero est, cum non est ordinata in affectu; tenebrosa vero, cum caret luce sapiencie in mentis aspectu. Nobis enim visibilis est terra interioris hominis per lucem exteriorem boni operis. Vel e contrario ordine mens dicitur invisibilis Deo: que caret luce sapiencie; affectus incompositus: qui caret amoris ordine; totum corpus tenebrosum: quod caret bone operacionis lumine.[25]

What is not composed (*incomposita*) lacks order. Order which is an interior, inner quality, hence, unseen, is essentially produced by the "light of wisdom" (*sapientia*), and is evidenced in the work itself, the composition.

"Out of modules, a unity is rendered; from component centonate parts, a totality is perceived; great is the power of the mind," wrote Grosseteste, quoting, in part, Augustine, but pointing the discussion in his own

---

posteriores in ordine naturali essendi, sic sunt priores seu posteriores in ordine numerali (*Hexaemeron*, p. 66). See also *Hexaemeron*, p. 89: et si successive facta, quanto temporis spacio fuerint facta: an videlicet toto diurno spacio in quo singulum operum factum est, an in spacio minori; simultaneity or successive process is also cognitive (p. 95):...iste temporali caret successione, et septem dies hic commemorati non temporaliter sibi succedunt, sed in cognicione angelica simul sunt. Ibi itaque simul sunt dies et nox, et vespera et mane. Furthermore, in his commentary on Aristotle's *Physics*, Grosseteste applies the concept of simultaneity to sound,...vel fit composicione ut domus vel consonancia simul sonancium vel ordinacione sicud consonancia consequenter sonancium vel abieccione sicud statua ex ligno vel lapide (*Comm. in Phys.* p. 19).

[23] ...res facta est et complens rem in esse suo secundo...Dicitur eciam grece a fixione, quia non fertur sed immobilem habet stacionem; quod convenit quieti habitacionis. Et forte hec melius paterent in nominibus ebreis, si quis eorum sciret institucionem et derivacionem et ethimologiam (*Hexaemeron*, p. 131). The term and concept, *res facta* is significant here. Simultaneity in terms of duration *ex parte* is presented in this context: Expositores quoque omnes eiusdem loci Aristotiles, tam greci quam arabes, dictum locum de perpetuitate motus et temporis et mundi, id est eorum duracione ex parte utraque in infinitum, concorditer exponunt (*Hexaemeron*, p. 59). We will return to the relationship of the concepts *duracione ex parte...concorditer*.

[24] The "principle of artifice:" Dicitur eciam ars 'principium' artificii, et 'principium' id ex quo fit facilius, et finis ultimus et optimus 'principium' eius quod est ad finem. Simpliciter autem principium omnium dicitur divina virtus ut primum movens et efficiens omnia (*Hexaemeron*, p. 65).

[25] *Hexaemeron*, p. 81. Grosseteste considers order together with function and beauty:...hoc est, complacuit ei in lucis create utilitate, pulcritudine et ordine. *Et divisit lucem et tenebras*, hoc est, rem formatam ab informi distinxit; non quod seorsum poneret hinc formatam et inde informem, remanente re in informitate, sed quod ipsa res, in quantum formata est, naturaliter distincta est a se ipsa informi, licet nunquam secundum actum essendi informis extiterit (*Hexaemeron*, p. 93).

direction.[26] Not only is a composite of *centones* a compositional principle, accomplished by God in the creation of the world, and again in the resurrection of the body with all of its parts, thus setting forth a model for imitation for the creative work that men can and do accomplish, but Aristotle, as well as Grosseteste, proceeded, from the work itself to the ways in which the composition, as a rational totality, could be perceived.

Cognition of a totality was accomplished by the understanding of parts, followed by the integration of these parts—essentially a leap from parts to the whole.[27] Through this process, gaps between parts were filled in by the

[26] *Hexaemeron*, p. 204, quoting Augustine (*De Gen. ad litt.*, III, 16 [*CSEL*, XXVIII.1,81-82]):"...magna et mirabilis vis est anime, que illam compagem ineffabili permixtione vitaliter continet, et in quandam sui moduli redigit unitatem...;" out of modules, unity. One part, however, in particular, leads the others, namely the head (*caput*); Quemadmodum enim, si videres hodie patrem aliquem familias, sanum mente et corpore omnique fultum prosperitate, familia tota ad omnem eius nutum promptissime obediente, nulla existente in familia rebellione vel adinvicem vel ad dominum sed omnibus concordi pace ordinatissimo domini imperio ministrantibus, et omne ipsius imperium sine rebellione, sine murmure et cum delectacione et summa facilitate perficientibus; videres quoque eundem patrem familias cras proprio vicio corpore infirmatum vehementerque debilitatum a racionis rectitudine, in pluribus demum familia consimiliter infirmata, et accionibus quibus delectabiliter et faciliter ministrare consueverat, minus apta; tota tranquillitas pacis et ordinis que hodie in domo patris familias iocundissima est ad considerandum, cras vertetur in confusum et perturbatum tumultum (God, father of the familial corpus, by the organizing power from the head maintains order: *Hexaemeron*, p. 238); cf. *Hexaemeron*, pp.69f: Capud autem Christus est...(Christ, as well, as *capud*). Quoting Bede, *Explanatio apocalypsis*, 2,12, Grosseteste adds the concept *coronatus* to *capud ecclesie*: "In ecclesia factam novimus Christi victoria salutem, pro qua dicit: *Data est mihi omnis potestas in celo et in terra*, non quam semper ipse habuit, sed quam in ecclesia ex tempore quo ipse voluit, tanquam capud in membris habere cepit. De potestate itaque creata dicit: *Data est mihi omnis potestas.*" Et Rabanus, exponens idem verbum, dicit quod hec non de coeterna Patri divinitate, sed de assumpta loquitur humanitate, quam suscipiendo minoratus est paulominus ab angelis et in qua resurgendo a mortuis gloria et honore coronatus est et constitutus super opera manuum Patris omniaque subiecta sub pedibus eius inter que omnia etiam mors ipsa que ei ad tempus prevalere visa est eius pedibus substrata est...Item, quemamodum est nunc Verbum Patris, Deus et homo, capud ecclesie, esset etiam Pater si esset homo capud ecclesie, et essent unius corporis plura capita, quod esset monstruosum (Grosseteste, *De cessatione legalium,* pp. 144f); and further, the connection of *capud* to rule: Unde parvulus, nisi ex consideracione fragilitatis proprie? Unde capud, nisi ex spiritu vivificato regente? (*Hexaemeron*, p. 205-6). From the head, power flows into the members.

[27] Grosseteste, *Comm. in Phys.* p. 2: Richard Dales' note on this context quotes from W. Burley's commentary on Aristotle's *Physics* (cf. lib. I, text com. 3 [Venice, 1482], ff. 3A-B):...procedendo a cognitione totorum compositorum ex principiis. Dales, for another context, points to Duns Scotus' remark that literacy, as well, has to do with establishing the relationship between parts and the totality of words within syntax. Letters, as parts of composites, are more marked than nature: nam sic totum compositum est notius naturae partibus componentibus: sed illo modo causa est notior naturae, id est, naturae in motu faciendi rem ex suis causis...(Grosseteste, *Comm. in Phys.*, pp. 3f [Johannes Duns Scotus, *Quaestiones in Physica*, II, 370f, lib. 1, *quaestio* VI,11]. It is of interest for our present inquiry that at the close of this passage, which received considerable subsequent attention, Grosseteste uses an example from the discipline of music: Ipse tamen parciales figuraciones motui manus ipsi sunt propinquiores. Racio huius, quod sensus comprehendant confuse, est in capitulo quinto prime musice, ubi dicit Boecius quod armonia est facultas differencias acutorum et gravium sonorum sensu aut racione perpendens. Sensus enim et racio quasi quedam facultatis

mind. Grosseteste, in dealing, for the most part, with a long-standing tradition, makes his greatest contribution in this intellectual area. He both understands and is capable of articulating an awareness of what is accomplished by the viewer, the receptor. He writes of the "congregating of the intellect," that is, the *collection* achieved by the mind in bringing together visually, sonorously, or conceptually separate components into a significant composition.[28] Proportional relationships are one example of this act of collating.[29] In order for the combination of parts to be significant, a construct must provide the rational background, or in other words, be perceived simultaneously by the receptor: "Omnis scientia et sapientia materiam habet et subiectum aliquod, circa quod eiusdem versatur intentio. Unde et hec sapientia sacratissima, que theologia nominatur, subiectum habet circa quod versatur. Istud subiectum a quisbusdam putatur Christus integer, Verbum videlicet incarnatum cum corpore suo quod est ecclesia."[30]

There are other areas of cognition addressed by Grosseteste in the context of dealing with the problem of composite. He makes the following observations: first, in bringing together parts into a totality, parts are more noticeable, as well as more instantaneously perceived, than the totality. The less a part resembles the whole the more difficult it is to understand and project a relationship between them.[31] Furthermore, as we have seen, the relationship of parts within a totality is by no means a random one, rather, parts are placed according to a conceptualized order within the mind of the arranger which then becomes perceptible to the cognition of the observer, as Grosseteste states: "Sic respectu cause prime que omnia sapienter disponit et

---

armonice instrumenta sunt [Grosseteste, *Comm. in Phys.*, p. 4.]) Cf. Grosseteste's presentation of completion, plenitude, and the multiplex within the containing unity of a perceived "body": ...quicquid habet quilibet alius quod ipse non habet in se ipso. Crescunt itaque iusti in plenitudinem corporis Christi...Multiplicantur autem per multitudinem personarum Christi corpus adimplencium...multiplicatur bonorum operum consummacione; replet aquas maris perscrutando legem secundum profunditatem spiritalis intelligencie (*Hexaemeron*, p. 198).

[28] Grosseteste, *Hexaemeron*, p. 22: Athena, secundum Grecos interpretacio est a 'congregando intellectum'...

[29] ..."natura simplex est sibique per omnia similis," quapropter maxime unita, et ad se per equalitatem concordissime proporcionata. Proporcionum autem concordia pulcritudo est; quapropter eciam sine corporearum figurarum armonia proporcione ipsa lux pulcra est et visui iocundissima. Grosseteste, *Hexaemeron*, p. 99, quotes Basil, *Hexaemeron*, then presents a proportional relationship as an "equal concord" with its own inherent beauty. The concept of a "proportional harmony of the (delineating) bodies of figures" will be discussed below. The Trinity itself is a porportional composite; accordingly, there is *quies* in equilibrium: Hec est angelorum et sanctorum, ut testatur Basilius, supra celum primum diffusa habitacio quietissima; hec in rebus corporalibus summe Trinitatis per exemplum demonstracio manifestissima (Grosseteste, *Hexaemeron*, p. 100).

[30] Grosseteste, *Hexaemeron*, p. 49: a theological construct stands behind this concept of aggregate.

[31] The relationship of cell to human body is both a contemporary example, and one which had ancient precedent: Democritus vero ex omnium figurarum atthomis infinitus putavit omne corpus constare et ex transposicione atthomorum (*Comm. in Phys.*, p. 57).

ordinat et propter aliquod bonum facit esse omne quod est, nichil casuale vel fortuitum."[32]

"Harmonization" is accomplished through intellectual agents or instruments. It is an intellectual activity, accomplished through intellectual substance, and is either accomplished all at once (*concursus*), or one part after the other (*concurrente*).[33] The mind either connects units altogether or one unit after the other.[34] Distance, apparently, is of no consideration to the mind's work of bringing together disparate parts. Whether component parts are contiguous or distant, large or miniscule (major or minor), the mind is able to achieve resolution.[35]

Grosseteste's discussion of cognition occurs in many different contexts, and under a variety of circumstances. His writing style, in some respects illustrates exactly the point he is making, namely, that the mind is able to extract, even from distant contexts, either a simultaneous composite or a contiguous continuity. In addition to this, however, a juxtaposition of two different, but related concepts is repeatedly brought up. On the one hand, Grosseteste's concept of cognition is apparently associated with literacy. Movements of the hand, in writing, and remembered movements from previous writings are instrumental in the cognitive process.[36] On the other

[32] Grosseteste, *Comm. in Phys.*, p. 45, a passage, among others, that brings up the problem area of *fortuna*. But *fortuna* is also described as a composite bringing together one event after the other: Igitur fortuna, cum non sit de hiis que fiunt propter aliquid, non fit ab uno intellectu vel una natura agente (p. 43).

[33] On the subject of intellectual agents: Item tantum duo sunt agencia intellectus, scilicet et natura et quidquid fit ab hiis; itaque quod vel ab uno eorum tantum vel ab hiis coniunctim vel a pluribus naturis vel a pluribus intellectibus coniunctim...(*Comm. in Phys.*, p. 43); intellectual substance:...duo principia que componunt essenciam facti, forma scilicet et subiectum...(*Comm. in Phys.*, p. 25); *concursus*:...ex concursione casus dicitur et utrumque concurrencium...(*Comm. in Phys.*, p. 45); *concurrente* implies constructed continuity: et si habet composicionem aut ex partibus quantitativis et tunc est continuum, aut ex partibus essencialibus que simul ordinate sunt et eius racio et diffinicio. Siquidem igitur continuum multa sunt quod est quod in continuo sit multitudo parcium quantitativarum, manifestum est (*Comm. in Phys.*, p. 8).

[34] *Copula* consists in the compounding or separating activity of the mind, See Gabriel Nucelmans, "The semantics of propositions," *Cambridge History of Later Medieval Philosophy*, p. 207.

[35] Grosseteste, *Comm. in Phys.*, p. 8.

[36] Movements of the hand are immediately expressive, and can be compared to other more abstract movements, as well as forms; see extended passage quoted above, n. 27 (Grosseteste *Comm. in Phys.*, p. 4). Cf. also: Et sicud in virtute motiva et arte et manu et calamo et attramento est tota figuracio littere scribende, sic in corporibus celestibus et motubus eorum forte describuntur omnes species terrestres et in natura agente et movente hoc quod in paciente et moto per motum adquiritur. In puncto lucis inclinantis se ad expansionem undique equaliter descripta est et taliter est figurata spherice (Grosseteste, *Comm. in Phys.* pp. 52f). In addition, the perception of diversity as a cognitive act is facilitated in writing: ...Diversificatur tamen in esse secundum diversas comparaciones et ordinaciones ad agens et ad paciens (*Comm. in Phys.* p. 5l). An additional concept which Grosseteste brings into the discussion of literacy is that of *prima facie*: Primus itaque sensus huius litere omnibus ymaginabilis, quem prima facie pretendit hec litera, est quod Deus in

hand, Grosseteste appears to be especially interested in symbolic cognition, which goes over and beyond the cognition of letters in written communication. Grosseteste, for example, in discussing the body, is dealing with an abstraction, which is substantial, yet intellected, and which carries the potential properties of density, variety, contrariety, and extremity. A comparison and juxtaposition of written *littera* and symbolic *corpus—sine littera*—injects a dynamic energy into Grosseteste's consideration of composite.

The ultimate reason for the importance of the concept of composite-composition is two-fold. The human body is a composite, therefore, composite, as an abstract construct, has direct application to life itself.[37] Furthermore, the idea of "body" carries with it a concept of "enclosure," of the boundaries of the object, being, or piece of work.[38] Secondly, composition, according to Grosseteste, achieves its importance as a concept because it is the ultimate example of regeneration. The fall of man into sin achieved, or eventuated in a splintering into diverse, alienated parts. To carry this a step further, the mysterious consolidating power, binding separate parts into an aggregative totality, had been dissolved by the Fall. From the standpoint of both the foundation from which the concept is originated, and the goal to which the concept strives, the theological principle of regeneration and the reconciliatory function of Christ as Head of the Church brings into a totality—a composition—that which had been splintered off into disparate components.[39]

There is still another facet; namely, that composite is seen to be a cognitive problem as well as a theological subject, and the description of creative process. Totality which is self-contained, has stability, and individuality, and is composed of centonate parts, must be *perceived* as well

---

principio temporis et rerum creatarum inicio fecit celum, quod ambit et circumdat et continet omnia huius sensibilis mundi cetera corpora, et terram hanc visibilem quam calcamus et inhabitamus; que terra adhuc erat inanis, quia nondum germinaverat terrenascencia, et vacua ab animalibus que eam erant inhabitatura (*Hexaemeron*, p. 56).

[37] *Hexaemeron*, p. 244, concerning the equivalence, composite=body:...ut ostendatur hic homo factus non solum secundum animam, sed et secundum corpus, in quo solo est distinctio sexus. The sole distinction between the sexes is a bodily distinction, since they are equal in their capacity for good:"...equalis sit virtus et bonorum operum adieccio" (a quotation from Basil, *Hexaemeron*, X, 12-14 [*SC* CLX, 196-200]). In omnibus enim que ad veras pertinent virtutes equiparari potest si vult mulier viro. (In everything pertaining to virtue, the woman is as well equipped with potential as the man.)

[38] Cf. *Hexaemeron*, p. 58, for an articulation of "boundaries:" *In principio*, resonat temporis inicium, et mundum a temporis principio esse factum, et non esse ex parte anteriori interminatum et infinitum. A related problem, namely, the eternity of the world is discussed in Grosseteste's *De finitate motus et temporis*, ed. Richard C. Dales in *Traditio* XIX (1963), 264, and, by the same author, *Medieval Discussions of the Eternity of the World* (Leiden, 1990).

[39] Cf. *Hexaemeron*, p. 251: *Et ecce bona valde*, non singulatim de hiis que ipso die facta sunt...Nisi forte illa, que singulatim in suo genere, et cum ceteris universaliter dici bona meruerunt?

as *established.* In describing composite as a multifaceted, widely-applicable problem, one was describing the means whereby essential separate modules of information could receive significance, either as a continuity with motion as a source of meaning, or as a simultaneously-occurring significant aggregate. The methodology of etymology, used, for example, throughout the *Hexaemeron* commentary of Grosseteste, was an *ordo construccionis* which employed modules or *centones* in constructing an aggregate of significance.[40]

Composite, as an important concept and term, is evidenced in all four of the quadrivial disciplines. As we have seen, Grosseteste culls examples, as they suit his cause, from arithmetic, as an illustration of the concept of series, of prior and posterior; from geometry as an example of continuity, and the form of the sphere; and he draws examples from the discipline of physics for motions that are abstract, since they are so far away. One notices, however, two features of the exemplification style used by this writer. First, in cases of a pivotal point—one which recurs, and appears to be essential to his argumentation on many levels—Grosseteste employs, without exception, a musical example. Secondly, one also notices that he uses these examples with remarkable sensitivity to the nature of the musical aspect that he is calling into his arena of discourse. If one takes this into consideration, one concludes that only a person with a high level of innate musicality could have understood the connections that Grosseteste makes.[41]

There were also other examples for this important concept of composite, namely, in writing specifically within the art of music. We will see how this concept could be—and was—exemplified in musical concepts, styles, and genres during this important developmentary period.

Robert Grosseteste's subject matter as well as the vocabulary he uses would have been familiar to the anonymous writer on music whose work we have been considering. The conceptual foundation discussed above forms a basis for both the subjects used and the terminology employed by this writer. Once one becomes acquainted with Grosseteste's lengthy, multivalent

[40] Etymologies composed by Isidore of Seville are centonate, that is, composed of *centones*, or self-contained parts, rather than developmentary.

[41] As in the example of composite itself:...et hoc simpliciter ut homo vel musicus vel composite, ut homo musicus. Et dicitur quod hoc fit homo ut homo fit musicus vel ex hoc fit homo ut ex semine animal vel ex inmusico musicus (*Comm. in Phys.*, p. 24); and again, for composite: vel fit composicione ut domus vel consonancia simul sonancium vel ordinacione sicud consonancia consequenter sonancium vel abieccione sicud statua ex ligno vel lapide (*Comm. in Phys.*, p. 19); for the passage, *Quod quidem igitur principia oportet esse contraria manifestum est*, Grosseteste's commentary follows: Ex eo namque quod supra supponitur, scilicet motum esse, sequitur fieri esse, et alia fieri et facta esse. Omnis autem motus aliquid innovat et facit esse actu quod non fuit prius actu sed potencia. Omne autem factum fit ex forma perfectiva facti, ut ex manente in facto; et ex contrario forme ut ex transeunte. Musicum namque fit ex musico ut manente, ex non-musico ut ex transeunte (*Comm. in Phys.* pp. 18f).

discussions of terms, the examples given by the anonymous writer make sense. The writer on music discusses material, not just as substance, but as sound and intellectual material; Grosseteste's concept of sonorous or temporal, as well as intellectual material, diversely organized, is also emphasized by the anonymous writer.[42] This material concept often introduces—as is the case with Grosseteste—a multiplicity of ways to express aggregate. These include expressions such as "collection," "clumping," "adding onto," among others, but, while setting forth the sense of aggregation, the equally important connotation of diverse parts is always included.[43] Further, the theoretical possibility of an infinitude of aggregate material can be deliberately defined through the boundaries placed by a *corpus*, or *res*—an objective composite with format sufficient enough to include diverse, or even contrary figures within *passiones* or modes.[44] It is especially of interest to note that the writer on music includes all of these concepts, and brings the terminology of *figurae* and *modi* together in essentially the same manner as Grosseteste; that is, the two writers elucidate and complement one another.[45] The anonymous writer also expresses a concept of pre-conceived material.[46]

Further, the composite concept of this music writer is essentially modular. Individual parts are combined to form an object, which is delimited and fashioned—a *res facta*. There is the implication of "availability" of units

[42] Material is obviously a very important consideration for this writer, cf. the following examples, among many, of connected material, ...*materialem coniunctionem* (p. 27), *ligatura materialis* (p. 47; sonorous material, with the implication of temporal material...*secundum <eundem> sonum vel diversum vel ambo* (p. 28); significant material...*sine materiali significatione non possunt totaliter comprehendi* (p. 36); simple material...*quia simplicia materialia fuerunt aequalia* (p. 49); and *volumen*: Sciendum, quod multiplex via et multiplex numerus modorum voluminum, ut supradiximus, contigit in talibus...sub tali forma haberet optimum volumen istius artis, de quo volumine tractabimus...Et plura alia volumina reperiuntur secundum diversitates ordinationum...(p. 82).

[43] *Anonymus IV*, ed., p. 23:...colligimus plures diversitates modorum, a context which includes: secundum diversas partes plenius utuntur; see also p. 26:...quod est mirabile, cum adiunctione diversarum vocum, p. 33: Sed differentia est materiali ostensione, quod hic quatuor coniuncta intelliguntur ante suam pausationem et ibi unum et tria coniuncta ante suam pausationem etc., and p. 64: Numerus est collectio unitatum ad invicem, a passage which includes several examples from the mathematical *artes*.

[44] *Anonymus IV*, ed., p. 64: *rei per se* (secundum Iordanum de Nemore), cf. p. 98. Jordanus de Nemore, a well-known mathematician, was chosen in Paris in 1222, to become the head of the Dominican Order. He died in 1237. Other contemporaneous writers on music, such as Iohannes de Garlandia, do not mention him.

[45] *Anonymus IV*, ed., pp. 36f: Omnibus computatis quae possunt computari prout numerus, pes, figura, coniunctio disiunctioque sufficienter...Et nota, quod diversitas numeri ordinis punctorum quandoque multiplex est, quandoque non, et quandoque per unicum modum ordinationis <procedit>, quandoque non, sed per diversum...Prima pars erat de sex modis temporis melorum, prout soni vel meli integre accipiuntur vel possunt vel poterunt sumi, cum quibusdam aliis et ordinibus, prout superius dictum est.

[46] *Anonymus IV*, ed., p. 74: Cantus vel tenor est primus cantus primo procreatus vel factus.

in which connection as well as disassociation can be comprehended.[47] One has the same question for this anonymous writer as for Grosseteste; namely, what constitutes the nature of these "units." The answer is the same: the *punctum*—Latin translation for *cento*—describes autonomous, component parts or modules. The term is ubiquitous within this music treatise.[48]

Individual *centones* or *puncta* are ordered. In fact, meaning depends on the significant order of individual units. Contexts, in this anonymous author's writing, in which the term *ordo* occurs frequently set forth the dual concepts of *diversity*, *variety*:

> Iterato solus ordo de eodem potest procedere duplici via secundum quod pausatio diversificatur in pede vel aliter secundum materiam, id est habendo respectum ad materiam, prout in secundo capitulo plenius patebit. Et nota, quod diversitas numeri ordinis punctorum quandoque multiplex est, quandoque non, et quandoque per unicum modum ordinationis <procedit>, quandoque non, sed per diversum.[49]

---

[47] *Anonymus IV*, ed., p. 23: *colligimus*, as well as *dividatur, frangatur*.

[48] *Anonymus IV*, ed., p. 27: Primus ordo tertii imperfecti extraitur a primo ordine tertii perfecti per diminutionem unius, *et sic erit trium punctorum vel sonorum* tantum cum una longa pausatione trium temporum. *Deinde ponenda sunt alia tria puncta alterius modi*...cf. p. 80: ...quae est diapason, optima *concordantia fit sub tali ordinatione et positione punctorum sive sonorum*, ut praedictum est; p. 33: Et sic de singulis quatuor cum sua pausatione intellige, sive fuerit eius reductio ad primum modum sive ad secundum, *et intellige eundem numerum punctorum* in isto sicut in tertio supradicto, quamvis modus sit diversus ab illo. *Sed differentia est materiali ostensione*, quod hic quatuor coniuncta intelliguntur ante suam pausationem et ibi unum et tria coniuncta ante suam pausationem etc; p. 40: *Puncta materialia,* prout depinguntur in libris et prout significant melos et tempora supradictorum, duplici acceptione accipiuntur...Per se et absolute duplici modo intelliguntur: primo modo, *prout simplicia puncta* sine adiunctione alicuius cum alio, secundo modo, prout ad invicem coniunguntur. *Simplicia puncta* quaedam accipiuntur, prout utuntur in tropis ecclesiasticis, et quaedam, prout utuntur in libris organi, *et hoc secundum sua volumina diversa*, ac etiam prout utuntur in libris notarum diversi generis, prout utuntur in quolibet genere omnium instrumentorum etc., prout in posteris patebit. *Puncta supradicta dicuntur apud quosdam notae, quare unus punctus nota vocatur*; apud aliquos figurae vocantur, quare nota figura potest dici; apud aliquos simplices soni dicuntur, et sic materiali signo pro formali intelligitur etc. (cf. Elias Salomonis, *GS* III, 18a: Littera non est punctus, sed signum, subiectum et firmamentum puncti...Sed littera est materia, super quam radicatur punctus...); p. 55: Sed usus quidam est in tenoribus discantuum sive motellorum, *et hoc propter pulcritudinem punctandi propter regulam quandam*: *quod possumus coniungere, non disiungatur*. Single terms and phrases dealing with individual *puncta*, as well as the cognitive process that brings *puncta* together, have been highlighted by italics.

[49] *Anonymus IV*, ed., p. 36; p. 23: Ordinatio principii primi aliorum modorum est ordinatio punctorum vel sonorum melorum... See also the following nuances of "diversity ordered:" Et satis sufficiebat tunc temporis eis, et non erat mirum, quia paucis modis utebantur iuxta diversitates ordinum supradictorum, de quibus in postpositis satis patebit (p. 32); Et isti diversi ordines crescunt semper per tria, unus supra alium post quatuor prima...Aliter possumus intelligere istos tres ordines supradictos sub tali forma...(p. 34); Et quandoque fit ordinatio punctorum sub certo numero, quandoque vero minime, et quandoque ordo melior est, quandoque nullus ordo melior est, prout loco ordinis sumitur (p. 36). For the expression, *fac ordines*, cf. p. 39.

The cognitive faculty makes sense of ordered *puncta*, bringing individual modules together into significant continuity. Cognition, with this anonymous author—as we have seen was the case with Robert Grosseteste—is mentioned frequently, since the total integrity of the composite—composition—is dependent upon cognition.[50] In addition, the importance of this topic is one aspect which differentiates the work of this anonymous author from that of his contemporaries or immediate successors.[51]

With respect to the concept of composite, the anonymous author discusses the same subjects, in identical ways, as Grosseteste. He draws an analogical equivalence between material and intellectual substance, frequently mentioning and elaborating upon aggregates, or the will and force "to clump." He presents a concept of *corpus*—an entity within the theoretical infinitude of material, providing an incapsulation, so to speak, of *figurae*, as well as conflicting *passiones* or *modi*. It is important to note how both authors move from one level to the other in explaining these constructive elements of composite. The *corpus* is composed of individual parts, standing, complete, as a *res facta*, a totality. From consideration of the completed totality, the authors consider parts, that is, *centones*, *puncta*, or *versus*, as modular self-contained elements, from which the composite is formed. These parts are placed, essentially by the creative will, into a significant order, to be perceived by the intellect in the process of cognition.

These were powerful concepts. The progression from one level to the other, as well as the total conceptual system, could be made comprehensible by the exemplary potential of music. An obvious example of this is the finished product, the musical composition—with an abrupt, clear break with silence at its beginning, and a return to silence at its end—disclosing what it means to be separated from infinitude. The musical composition, with its

[50] *Anonymus IV*, ed., p. 22: Et sic non sunt plures nisi triginta admixtiones secundum diversitatem et sex cum se ipso; process in perception: per modum circularis processus...non coniunguntur actuali coniunctione penes materiam, sed subintelliguntur coniungi (ed. p. 27)...et ita fiat processus, donec circulatio perficiatur (p. 36); expressions of clarity, the "plain," and bringing together, by a mental process, that which had been disjunct abound:... secundum diversas partes plenius utuntur (p. 23); quod hic quatuor coniuncta intelliguntur (p. 33); pes integer intelligitur (p. 34); Omnibus computatis quae possunt computari prout numerus, pes, figura, coniunctio disiunctioque sufficienter conveniant (p. 36);...solo intellectu iuxta aequipollentiam bene ligantur (p. 47). There is the implication that connections are impossible, if not achieved by the intellect: Et hoc dictum est propter plura puncta, quae non possunt invicem ligari secundum materiam nisi solo intellectu (p. 48).

[51] Footnotes to Fritz Reckow's edition of the anonymous treatise, helpful as they are, draw attention to common subject matter, accentuating similarities, rather than indicating key differences between the authors. References refer to similar topics, but tend to give the overall impression that the writers involved—Johannes de Garlandia, Franco of Cologne, Anonymous St. Emmeram, for example—form a much more unified group than is actually the case. A systematic discussion of significant differences in emphasis and treatment of subject matter among these authors has not been undertaken.

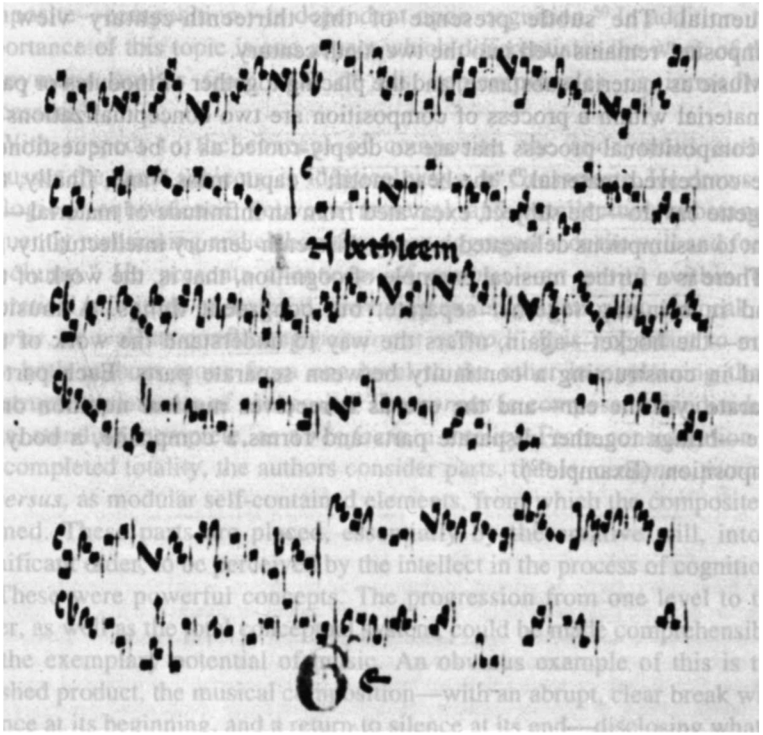
component parts, also gives a clear and comprehensible example of the "body," a definite delimitation of intellectual, spiritual "material." There were other ways in which music could exemplify this multivalent composite concept which were, perhaps, less obvious, but even more influential. The subtle presence of this thirteenth-century view of "composite" remains well into the twentieth century.

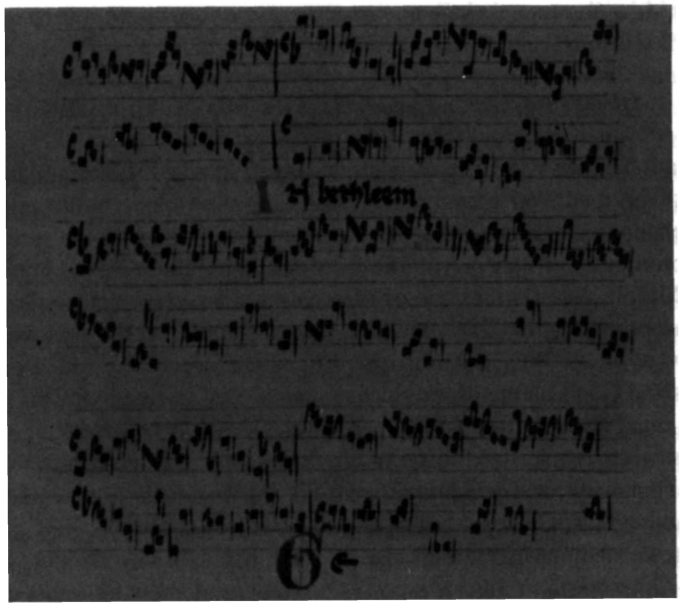
Music as material substance, and the placing together of modules or parts of material within a process of composition are two conceptualizations of the compositional process that are so deeply-rooted as to be unquestioned. "Pre-conceived material," "the head motif," "caput mass," and, finally, the soggetto cavato—the subject, excavated from an infinitude of material—all point to assumptions delineated in early thirteenth-century intellectuality.

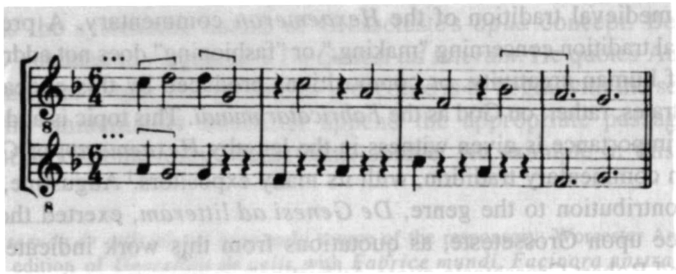
There is a further musical example of cognition, that is, the work of the mind in bringing together separate, but congruent things. A musical genre—the hocket—again, offers the way to understand the work of the mind in constructing a continuity between separate parts. Each part is separate, yet the ear—and the eye as it receives musical notation on a page—brings together disparate parts and forms a composite, a body, a composition. (Example[52])

[52] *Anonymus IV*, ed. p. 61: ut quidam Parisienses fecerunt et adhuc faciunt de *In saeculum*, le hoket Gallice, quod quidam Hyspanus fecerat etc. Cf. William Dalglish, "The Origin of the Hocket," *Journal of the American Musicological Society* 31 (1978), pp. 3-20, who summarizes the meager bibliographical information on the hocket, and states that "hocketing was but one of a number of improvised manipulations of Gregorian melodies common before the Notre-Dame music was composed..." (p. 3), a comment without foundation.

Example: *In Bethleem* (*with Hoqetus*). Wolfenbuettel, Herzog-August Bibliothek, 677 Helmstad. 628 (transcription, *Schriftbild,* pp. 40f.), f. 44v




bethleem



CHAPTER NINE

OPUS: A CONCEPTION OF THE MUSICAL WORK

"Read Genesis!" wrote Augustine. Many medieval writers took his advice. The medieval creation or *Genesis* commentary tradition, though comprehensive and significant, has not been considered with the seriousness and thoroughness its sheer volume warrants. The reason for its importance in the Middle Ages is that one of the central ideas presented in Genesis is the concept of creation. Early medieval commentators on Genesis, including such writers as Basil, Ambrose, Augustine, Jerome, and Bede, all emphasized God's nature or providence, manifested in creation. This activity was, in most respects, unique to God. It was God's work to create.

Grosseteste emphasized this too, but there is a further emphasis which he treats extensively, and which sets apart his *Hexaemeron* commentary from the tradition of Genesis commentaries which preceded his, namely, Grosseteste's emphasis on the *opus*, or work itself. In this chapter, we will look at Grosseteste's multivalent *opus* concept, and show how this concept quickly found application in the specifically musical work, a composition. Grosseteste's many-faceted discussion of the artistic work articulates an emerging concept of *opus* in the thirteenth century, a concept which would have immediate consequences for the musical work of art.

For an essential background to these considerations, let us return to the earlier medieval tradition of the *Hexaemeron* commentary. A prevalent medieval tradition concerning "making," or "fashioning" does not address the topic of human creativity, or compositions produced by this endeavor. It concentrates, rather, on God as the *Fabricator mundi*. This topic is addressed, and its importance is given witness in the lengthy *Hexaemeron* or Genesis creation commentary tradition, with its many expositors.[1] Augustine, in his early contribution to the genre, *De Genesi ad litteram*, exerted the most influence upon Grosseteste, as quotations from this work indicate. Both Bede and Robert Grosseteste quote Augustine's commentary extensively; in fact, Bede's commentary could be said to be a mosaic of passages from this work—a composite of *centones*—placed together in appropriate ways by this commentator in the early years of the eighth century.[2] The topic of God

---

[1] For a summary of the *Hexaemeron* or Genesis commentary tradition, see the chapter, "*Firmamentum* and Motet," n. 1, below.

[2] Cf. *Bedae Venerabilis Opera*, II *Opera Exegetica*: *In principium Genesis*, ed. Ch. W. Jones (*CCSL* CXVIIIA, Turnhout, 1967), an edition which distinguishes quotations. Note, as well, the copious quotations of and allusions to Bede's *Hexaemeron* within the Dales and Gieben edition of Grosseteste's *Hexaemeron*.

as the maker/fabricator of the universe is also articulated in the many textings of the long responsory melisma on *Fabrice mundi* within in the responsory, *Descendit de celis*.[3] Perhaps this particular example, from the immense body of music for the office liturgy, gives us an indication of just how influential the theme of "God, the Creator, and Fashioner of the Universe" was. Within the large repertory of responsories sung during the medieval morning offices, this particular responsory was selected for extraordinary textual elaboration, which continued well into the fifteenth century. These textual emendations include texts, such as *Facture*, *Facinora*, *Fac Deus*, which clearly deal with the topic of *Deus Fabricator*.

Amongst the many expositors on the Genesis account of creation mentioned above, Robert Grosseteste is the only commentator who both systematically sets up a multifaceted, shaped, distinct concept of an *opus*—the artistic "work"—and suggests unequivocably that man, created by God himself in his own image, could participate in this creative process, under similar conditions, and with analogous results. People, too, could create visible *opera*, as manifestations, as Grosseteste states, of "inner mental landscapes." This, of course, takes Grosseteste's multivalent discussion of the concept of *opus* out of a strictly theological and relatively abstract sphere of creation—removed from human experience both chronologically and conceptually—and places it in a more personal arena. In his Genesis commentary, Grosseteste considers the inner sources of human creativity and spiritual productivity.

A comparison of Robert Grosseteste's commentary with that of Bede indicates the conceptual and spiritual distance between the two authors, as well as the systematic nature of Grosseteste's *opus* concept. Bede was greatly indebted to Augustine's *De Genesi ad litteram*. He quotes Augustine frequently, at length. His method of procedure is to begin with the scriptural text and immediately thereafter append the appropriate passage from Augustine's commentary on the same source. An example of this, which

---

[3] *Descendit de celis missus* (one early source of the responsory: Worcester Antiphonale 31), cf. edition of *Descendit de celis* with *Fabrice mundi*, *Facinora nostra relaxari mundi/Facture dominans* from the early twelfth-century source from Nevers, Paris, Bibliothèque nationale, nouv. acq. f. lat. 1236, ff. 36r-v. in: van Deusen, *Music at Nevers Cathedral. Principal Sources of Medieval Chant*, 2 vols (Binningen, Switzerland, 1980), I, pp. 9, 62, 85-86; II, pp. 10-14, with the text, *fabrice mundi*, was a topos, for example, in Augustine, *De Genesi ad litteram*, IV,7 (*CSEL* XXVIII.1,103); Bede, *Hexaemeron* I (*PL* XCI, 33d, ed. Jones, pp. 32f); Grosseteste, *Hexaemeron*, pp. 264-266, and included many variant texts, such as *Facture*, *Facinora*, *Fac Deus*, all of which deal clearly with this topic. It is of interest to observe that, although there are no direct quotations from either Bede or Augustine's Genesis commentary to be found in the responsory text, the vocabulary is the same. Expressions or single words such as *factura*, *optimus conditor*, *completa mundi fabrica*, abound, making up a fabric of associations common to both the Augustinian Genesis commentary and the texted melismata of the responsory. A constellation of verbal associations had, by the time of the writing of the responsory texts, accrued to this theme.

deals with the subject matter at hand is Bede's commentary on Genesis 1,31: *Viditque Deus cuncta quae fecit et erant valde bona*, to which Bede remarks: "Quia de singulis Dei operibus singillatim fuerat dictum quod 'videret ea esse bona,' recte in conclusione perfectis omnibus positum est cum additamento quia, *Vidit cuncta quae fecit et erant valde bona.*"

Immediately thereafter, Bede quotes from Augustine's commentary:

> Sed quaeritur merito quare de homine facto non sit adiunctum singillatim, "Et vidit Deus quod esset bonum," sed ipsius magis factura inter cetera universaliter laudando reservetur? An quia praesciebat Deus hominem peccaturum nec in suae imaginis perfectione mansurum, non singillatim sed cum ceteris eum dicere voluit bonum velut intimans quid esset futurum?...Homo igitur ante peccatum et in suo utique genere bonus erat, sed scriptura praetermisit hoc dicere ut potius illud diceret quod futurum aliquid praenuntiaret...Deus enim naturarum optimus conditor, peccantium vero iustissimus ordinatur est, ut etiamsi qua singillatim fiunt delinquendo deformia, semper tamen cum eis universaliter pulchra sit.[4]

Bede's method of textual composition, which is, essentially, that of placing together a mosaic of scriptural passages, and directly following them with quotations from Augustine's *De Genesi ad litteram*, remains identical throughout his commentary. His ideas do not deviate fundamentally from Augustine's thesis, namely, that man, as a genre of creation, was good. Taken singly, as a particular specimen, man, however, was not perfected as made in God's image, since God knew exactly what would inevitably occur—the Fall. Man would become sinful. It is of interest to note that Bede's compositional process is essentially the same as that which occurs in liturgical music, or *cantus*, which is, as well, a composite of phrases, both textual and musical, taken from diverse and various parts of scripture.[5]

Nowhere, either in his commentary on this passage, or elsewhere, does Bede develop a concept of an *opus*. There is no particular attention paid to the word/concept, and no systematic presentation, with its multiplex facets, of such a concept is given. In short, Bede nowhere separates an *opus* concept from God. This is true, as well, for Augustine, but quite the converse is the case with Grosseteste. This author deals with the same subject matter,

---

[4] Cf. Bede, *In principium Genesis*, ed. C. W. Jones, pp. 31f; Augustine, *De Genesi ad litteram* III, XXIV (*CSEL* XXVIII I, pp. 91f: *PL* XXXIV, cols. 295f): And God saw that it was good, but is this reserved for praise made more amongst themselves universally--that is, not related to single instances, but in general? For God knew the sinfulness of man, that he neither could be made perfectly in his own perfection, nor that one after the other could be good, intimating the future as, in particular, deformed, yet always, however, universally beautiful.

[5] Cf. Judith McClure, "Bede's Notes on Genesis and the Training of the Anglo-Saxon Clergy," in: *The Bible in the Medieval World. Essays in Memory of Beryl Smalley*, ed. Katherine Walsh and Diana Wood (Oxford, 1985), pp. 17-30; compositional process common to both text and music is treated in the chapter "A Theory of Composition and its Influence," above.

including many of the same sources, since Grosseteste also read and quoted both Bede and, especially, Augustine.[6] The importance of, and search for the significance of an *opus* concept is seen, for example, in the chapter titles Adam Marsh added to Grosseteste's commentary. Allusions to *opus* are frequent.[7]

Throughout his *Hexaemeron*, Grosseteste returns frequently to the concept of the artistic creative work, the *opus*. Fashioning a system, that is, a mental construction from diverse tenets or aspects of the overall theme, he presents a complete concept relating to *opus*, the artistic work. Grosseteste, first of all, and most importantly, does not differentiate between God the maker and his work, and the human fashioner of works. Furthermore, as a being made in God's image, man has a mandate to create. This interpretation sharply differentiates Grosseteste's reading of the Genesis account and the earlier medieval interpretations of the same passage.

Man is made in the image of God, therefore, he does God's work, and in similar ways. This includes spiritual creativity. Furthermore, God's process of creation beginning at an identified point in time, used a measured time-lapse during an extended working-out process, and culminated with a separate precisely-defined section, the termination. Man's creative process follows a similar pattern. It is significant that the termination was not momentary, but was composed of both termination and a period following it, which was God's seventh day of rest. It is both appropriate, and, in some ways, unavoidable, that man should proceed with his own work as God does with his. This entire line of reasoning constitutes the greatest departure from earlier medieval exegesis on the subject of creation.

Secondly, Grosseteste stresses, as an important aspect of his *opus* concept, completion, or the final moment at which all contrary lines of discussion are resolved. This is the termination. Thirdly, in contradistinction to Bede, as well as other medieval commentators on Genesis, Grosseteste builds up an entire system of aspects concerning *opus*. Let us follow his thought process as he constructs this multifaceted, complete concept, bringing together an entire complex of aspects related to and elaborating this idea. When Grosseteste is finished with his *opus* concept, we see that he has constructed a complete system dealing with the concept, a system which is especially useful for its exemplification in the musical work.

We have seen that Grosseteste's views of God as maker, his work as that which is made, and man as an analogous maker differ from earlier concepts

---

[6] Cf. John T. Muckle, "Did Robert Grosseteste Attribute the *Hexaemeron* of St. Venerable Bede to St. Jerome?" *Mediaeval Studies* 13 (1951), pp. 242-244.

[7] See Grosseteste, *Hexaemeron*, pp. 341-350: Quid per significacionem et consignificacionem eius quo dicit *creavit* vel *facit* intelligitur (I:11), which distinguishes beteen the two concepts, *creavit, facit*. Note, as well, a further distinction between creation *materiam ex nichilo* compared to *ex materia ingenita* (I:15).

of God as *Fabricator mundi*. Grosseteste makes no differentiation between God and man with regard to man's ability to work. As a matter of fact, woman is also made in God's image; both sexes are made in the image of God, and Grosseteste clearly states that gender difference is exterior. Spiritually, there are no sexes, he remarks, quoting the Apostle Paul for whom there was, in Christ, neither male nor female.

> Itaque, quamvis hoc in duobus hominibus diversi sexus exterius secundum corpus figuratum sit, quod eciam in una hominis interius mente intelligitur, tamen et femina, que corpore femina est, renovatur eciam ipsa in spiritu mentis sue in agnicione Dei, secundum imaginem eius qui creavit, ubi non est masculus et femina.[8]

What is more, writes Grosseteste, Augustine agrees.

In the course of discussion concerning the premise that man, made in the image of God, had the potential to create works as God can and does, Grosseteste takes the opportunity to differentiate between *similitudo*, *imago*, and *imitacio*.[9] This differentiation, and the vocabulary used to express it, unite his arguments and draw together the entire commentary. From his consideration of man, made in God's image, and the work that God properly does, Grosseteste defines the work itself as containing within itself a concept of process. God's work, the world, has a beginning, a progression during which it was made, and a completion of the work.[10] Both the beginning of the work, as well as its completion are fashioned, made.[11]

---

[8] Gal. 3,28; Cf. Grosseteste, *Hexaemeron*, pp. 243f. The passage continues: Sicut autem ab hac gracia renovacionis et reformacionis imaginis Dei non separantur femine, quamvis in sexu corporis earum aliud figuratum sit, propter quod vir solus dicitur esse imago Dei et gloria, sic et in ipsa prima condicione hominis secundum id quod femina homo erat. Habet itaque mentem suam eandemque racionem, secundum quam ipsa quoque facta est ad imaginem Dei. Sed propter unitatem coniuncionis fecit Deus, inquid, hominem ad imaginem Dei. Ac ne quisquam putaret solum spiritum hominis factum, quamvis secundum solum spiritum fieret ad imaginem Dei, *Fecit illum*, inquid, *masculum et feminam*, ut iam eciam factum corpus intelligatur...Ex hiis verbis Augustini manifestum est, quod ideo subinfertur: *masculum et feminam fecit eos*, ut ostendatur hic homo factus non solum secundum animam, sed et secundum corpus, in quo solo est distinctio sexus.

[9] Grosseteste, *Hexaemeron*, pp. 217ff, for commentary on *Faciamus hominem ad imaginem et similitudinem nostram*.

[10] Grosseteste, *Hexaemeron*, p. 58, a commentary on *In principio*: Primum itaque verbum, videlicet: *In principio*, resonat temporis inicium, et mundum a temporis principio esse factum, et non esse ex parte anteriori interminatum et infinitum; cf. Grosseteste, *Comm. in Phys.*, p. 46, n.f.

[11] Grosseteste, *Hexaemeron*, pp. 279f: Dicitur ibi: *Factum est mane, ut inciperet esse dies*; non dictum est: 'Factum est vespere, ut finiretur'; sed dictum est: *Factum est mane*, ut fieret dies sine fine. Sic incipit ergo requies nostra quasi mane; sed non finitur, quia in eternum vivemus. Ad hanc spem si facimus quicquid facimus, sabatum observamus (cf. Augustine, Sermo IX, *De decem chordis*, V [*PL* XXXVIII,80]). Cum itaque ab operibus nostris per spem progredimur in quietem, die septimo requiescimus ab opere nostro universo. Et quia hec Deus in nobis facit, ipse in nobis requiescit ab opere suo in die septimo. Item requiescit Deus in nobis cum complacet ei in nobis...Et cum opera nostra exteriora istis interioribus bonis sunt correspondentia, tunc fiunt Deo accepta, et eius in nobis sunt opera. Requiescit igitur in nobis

Termination, therefore, is also a defined, recognizable state, as well as a moment.[12] Furthermore, the work process invokes two important aspects, namely, the digestive aspect of work, and how work actually takes place, that is, that it is accomplished sequentially, successively, or simultaneously, Both manners of working are mentioned throughout Grosseteste's commentary.

Christ, according to John's Gospel 4, verse 34, said, "My meat is to do the will of God and finish his work." Just as meat must be masticated, our work must be chewed over and digested before it has value. This, according to Grosseteste, is the middle, processional phase of the work process.[13] God's work, furthermore, was accomplished both successively and simultaneously. On the one hand, there are "deliberately successive operations" performed by God which contrast with simple, totally simultaneous processes. The juxtaposition of these two types of creative work recur throughout the commentary, for example:

> Si enim haberet a principio, non opus aliquod absolvisset in primo principio. Ostenditur quoque per verbi preteriti consignificacionem incomprehensibilis celeritas operationis. Unde Ambrosius: "Pulcre ait: *In principio fecit*, ut incomprehensibilem celeritatem operis exprimeret, cum effectum prius operacionis implete quam inicium cepte explicavisset." Insinuatur eciam in eadem verbi consignificacione nulla in operando successio aut ante operacionem successiva deliberacio, sed solum simplex et tota simul eterna provisio; nulla quoque in operando instrumentorum aut alterius rei adminiculacio, sed operatricis virtutis infinita potencia; que tanto operi dedit consumacionem; quam non prehibat operis incoacio.[14]

Each aspect of the work itself is an entity, is considered, shaped by the will, and can thus be identified. The beginning has a place in time and space, as well as in the will of the creator, the middle processional phase is marked out by a distinctive methodology, that of digestion, with some features occurring at once in time, others, step by step. Finally, the termination is also an entity, a shaped, characteristic component of the finished work. Grosseteste suggests these three parts of his *opus* concept, then differentiates and elucidates each one. All three aspects are important enough to him to be repeated, with further emphasis, and extended dimensions.

---

a suis operibus per nos factis in die septimo, id est in donorum et peticionum et virtutum et beatitudinum completo septenario.

[12] Grosseteste, *Hexaemeron*, p. 267: Deus complet opus suum, id est sui operis apponit et facit ultimum.

[13] Grosseteste, *Hexaemeron*, p. 261: Ipse enim Christus ait: *Meus cibus est ut faciam voluntatem eius qui misit me, ut perficiam opus eius*. Inde igitur pascitur Christus, unde in se vel in nobis et nos in ipso voluntatem Patris et opus perficimus; nec aliunde convenit nos pasci, qui sumus eius membra, quam unde pascitur ipse, qui est nostrum capud.

[14] Grosseteste, *Hexaemeron*, pp. 67f.

The work, when it is completed, as well as during the process of completion, is *good.* The finished work is its own benediction and testifies to the power of the creator. In this context, Grosseteste discusses two important concepts: the concept of *proprietas*, that is, the innate material and spiritual qualities of the potential work which are brought to *perfectio* during the process of completion. The dual principles of *proprietas* and *perfectio*, which are contingent upon one another, and necessarily complement each other, are principles which are frequently encountered in the discussion of the creative work. The work, demonstrating the power of the creator, is brought to perfection out of its own inherent properties.[15]

The *opus*, furthermore, according to Robert Grosseteste, is the outer, visible expression of an inner landscape. Creative work is mental and inspirational, as well as material. Grosseteste uses two distinct expressions for working with or forming material substance depending upon whether an outer construct or an inner *opus* is being discussed:

> Plasmacio vero vel ficcio proprie pertinet ad corpus, quod de limo seu pulvere formatum est. Et hanc differenciam faccionis vel plasmacionis insinuat, ut aiunt, Psalmista dicens: *Manus tue fecerunt me et plasmaverunt me*; quasi dicat *fecerunt me* secundum interiorem hominem, et *plasmaverunt* secundum exteriorem. Plasmacio enim proprie convenit vasis fictilibus de luto formatis.[16]

This concern with the distinction between inner, mental, inspirational, activity, and making or forming outer corporeal objects brings up the consideration of God's inspirational work. Breathing life into man was a different sort of creativity. The inspirational quality in creating works is a thing onto itself. In this context, Grosseteste, bringing Augustine's *De civitate Dei* into his discussion, discusses the nature of inspiration:

> Secundum igitur hunc modum exponendi, inspiracio vel insufflacio, qua inspiravit vel insufflavit Deus in faciem hominis spiritum vel flatum vite, non significat anime creacionem post corporis humani formacionem, sed

---

[15] There is an additional aspect related to the dual concepts of *proprietas/perfectio*, namely, that perfection-completion is accomplished through *motion*:...cum res per mocionem perfecta in esse quietatur (Grosseteste, *Hexaemeron*, p. 268). See also *Hexaemeron*, p. 123:...vis inclinativa ad sensibilium produccionem. In corporali tamen materia non potuit esse vis inclinativa in hominis racionalis consumacionem. Que vero habuerunt inclinacionem in materia ad actum essendi aliquid perfectum, non egressa sunt in actum essendi nisi per auctum eterni Verbi. Huiusmodi enim potencia inclinativa per se insufficiens est actum suum educere. Nil autem impedit dictum modum de impressione potencie inclinative ad actum essendi, sive fuerit rerum creacio successiva, sive fuerit subita et simul. The conceptual duality, *proprietas-perfectio* appears in music notational nomenclature, exemplifying the fact that a terminology used during this period to discuss music was not independently employed, but, rather, was understood against its essentially theological backdrop. Without this conceptual background, terms such as *proprietas-perfectio* are incomprehensible if taken only within their music notational context. See also above, "*Ubi Lex*."

[16] Grosseteste, *Hexaemeron*, p. 243.

> eius prius facte in corpus iam factum infusionem. De hiis tamen nil pertinaciter asserit Augustinus, sed sub modo disceptacionis omnia proponit sine affirmandi temeritate. Quedam autem translaciones sic habent: "Inspiravit in faciem eius spiritum vite." Unde quidam voluerunt intelligere Spiritum Sanctum hic datum primo homini designari, et non tunc animam primo homini datam, sed eam que iam inerat Spiritu Sancto vivificata. Sed Augustinus in libro *De civitate Dei* terciodecimo ostendit hunc intellectum esse falsum ex consuetudine Scripture, que in greco idiomate pro Spiritu Sancto ubique habet hoc vocabulum grecum, *pneuma*, et non hoc vocabulum, *pnoe*...Dicitur tamen et spiritus creatus quandoque *pneuma*, sicut et *pnoe*. Grecus autem codex non habet hic *pneuma*, sed *pnoen*. Unde non potest hic signari significacione literali et historica Spiritus Sanctus, sed spiritus creatus. Unde quidam translatores latini non 'spiritum' sed 'flatum' transferre maluerunt, ut expresse intelligeretur anima secundum illud Ysaie: "Omnem flatum ego feci," ubi nostra litera est: *Et flatus ego faciam*, omnem animam procul dubio signans. Cassiodorus autem ait quod in hoc loco "dictum est 'insufflavit,' ad exprimendam operis dignitatem, ut agnosceretur aliquid eximium quod ore Dei prolatum est."[17]

There are two further ramifications of this inner-outer dichotomy. First, the outer work may or may not be present; it is not the sole validation of the inner mental landscape. Faith, for example, writes Grosseteste, is validated by works *only* if the object of faith *is* works. Otherwise, faith itself, which is interior, is its own justification, and is a "work," the implication being that mental constructs, attitudes, and even "inspirations" are "works."[18]

A further tenet of the same group of considerations is that the work is an entity onto itself. It is *in se*. It does not supply a need, in that it is, and remains a part of the creator, but rather has its own autonomous identity and very quickly separates itself, by completion, from its creator.[19] Grosseteste remarks that God rested from his work. Distance was created between the creator and the finished product. He "quieted himself" in the contemplation

---

[17] Grosseteste, *Hexaemeron*, pp. 300f; notice Grosseteste's use of terms such as *pneuma*, *prius factus*.

[18] Grosseteste, *Hexaemeron*, p. 302: In sapiente enim palpebre deliberacionis precedunt gressus exterioris accionis, et oculi sapientis sunt in capite eius, hoc est, prudens previsio in mente providente. Volens enim edificare per exteriores operaciones, prius computat sumptus in prudenti premeditacione. Ocultus autem hortus virtutum interius, quasi virgultorum et herbarum in terra in causis materialibus antequam erumpant in exteriorem actum tanquam virgulta et herbe super terram, potest esse plenus et perfectus quoad meritum, licet nunquam procedat in actum; quia si deest exterior occasio ut agat quis opere exteriori, sufficit ei virtus interior tam ad meritum quam ad premium. Fides enim sine operibus mortua est, si adest facultas operandi. Absente vero operandi facultate, iustificatur iustus ex sola interiori fide.

[19] Grosseteste, *Hexaemeron*, p. 272: Sic eciam in hoc loco dicitur quod Deus requievit ab operibus suis, id est racionalem creaturam in se quiescere fecit ab operibus suis; per opera namque visibilia ipso illustrante mentem interius ascendimus in invisibilia ipsius in quibus per contemplacionem et fruicionem quiescimus, nullo extra ipsum egentes, neque in aliquid extra ipsum tendentes, sed in ipso omne desiderabile tenentes;...Ab omnibus igitur operibus suis, nos in sue quietis cognicionem et fruicionem manuducit, et in ea nos quietat.

of the work. This *quies*, unlike the processional aspect of the work, does not involve the dialectical process. Again, Grosseteste makes the distinction between the successive work process and the simultaneous viewing, or quietude, in the presence of the completed work.[20] An additional point follows from the last, namely, that "rest" itself is an entity, with characteristic identify. "Rest" possesses an identity; it is not simply the absence of activity.

An *opus* is a composition. The discussion of creation as involving both mental, spiritual, inspiration or infusion, and the formation of corporeal materials brings up the fact that an *opus* is a totality composed of separate and distinct elements. The *opus* is a unity, a totality, just as man is a unification of parts, each distinctive and functional.[21] There is, furthermore, within the total composition, order among the parts: "Materia igitur et magnitudo et mensura ostendunt potentiam creantem, formantem, et continentem. Forma vero et species et numerus ostendunt sapientiam creantem, formantem, et continentem. Composicio vero et ordo et pondus ostendunt bonitatem creantem, formantem, et continentem."[22]

In this context—as in many others—the concept of *opus* is linked to *compositio*. This is a relationship important to Grossteste's *opus* theory. Through this connection another dimension is added to his treatment of *opus*, namely, the concept of material *prius factus*, that is, a discrete portion of a composite which existed previously, was, in a sense, "prefabricated." This particular concept gains significance during the same period in writings related specifically to music. Let us see what use Grosseteste makes of it.

Quoting Augustine, Grosseteste mentions the fact that what is specifically "godly" within God's nature is his spirit. What is specific to the creative activity of God, therefore, is his breath—the breath of spiritual vitality—infused into corporeal material. It is of particular interest that the material was not made first, to be filled later with spiritual life, rather, the life itself was *prius factus*. There is a relationship, therefore, to both Augustine's and Grosseteste's discussion of *pneuma*. *Pneuma*, the breath of God, existed first, to infuse, enliven, and completely inspire the surrounding

---

[20] Grosseteste, *Hexaemeron*, p. 271:...sed ita fecit opera sua ut opera facta ut in ipso, per ipsum, ad ipsum, bene essent. Igitur non ut alii artifices requievit in operibus suis factis, sed in se requievit post opera facta, sicut in se requievit antequam fierent, nichil quietis ab illis assumens.

[21] Grosseteste, *Hexaemeron*, p. 243 (man as a composite): Et quia homo secundum racionem et intellectum est Dei imago, non autem secundum corpus vel corporalia, suspicati sunt quidam quod Scriptura intendit in hoc loco enarrare condicionem hominis solummodo secundum anima, et inferius, ubi dicit formatum hominem de limo terre, plasmacionem eius secundum corpus.

[22] Grosseteste, *Hexaemeron*, pp. 220-223; see especially p. 223.

material.[23] In all cases, the *opus* proceeds from both wisdom and experience. There is, accordingly, an intellectual composite within a work of art. Prudence moderates experience, and experience perfects knowledge.

The subject was crucial for Grosseteste. First, he frequently returns to the topic. Second, he progresses step by step to a multifaceted concept of *opus*. Third, perhaps most importantly, Grosseteste, in exposing an *opus* concept, is describing the work habits and their results when the creator of the universe is at work. Hence, the subject is awe-inspiring. From his considerations, however, come a brilliant exposition and an analysis of the component parts and procedures for a work of art in general.

The act of creation is legitimized by the fact that God does it. People do it too, because they are made in God's image. The resultant work has format: a beginning, a middle processional phase, and a termination. All three phases are consciously fashioned. A musical work, therefore, does not just cease to be, with a simple cessation of sound, rather its termination is, as the rest of the composition, made. The finished work is good; it gives witness to the power of the creator. Its perfection proceeds out of its intrinsic properties.

A work of art is the outer, visible expression of an invisible mental landscape. It has an autonomous existence, and, when finished, very quickly becomes separated from its creator. There is distance between the one who has made it and the work itself. Finally, the finished *opus* is a composition. Man, for example, is also a composite, a totality with parts which are inseparable, with the most important ingredient—the breath of inspiring life—in existence before the other parts. This inspiring breath of life, the *pneuma*, as it inspires, also vivifies and unites all parts into a convincing, efficacious unity.

Music, as it existed in time, and partook of time, could exemplify this multivalent *opus* concept in unique and highly effective ways. The vocabulary collected by Grosseteste in his discussion of *opus* could be, and was applied to the specifically musical work of art. Terms such as *proprietas* and *perfectio*, as well as *ordo*, took on specifically musical significance in the first half of the thirteenth century. An older idea, *pneuma*, would itself be infused with new life, as it appeared connected to the concept of *cantus prius factus*. Finally, the succession of suggestions that a work of art was a composite—a composition—with a carefully conceived beginning, a middle,

---

[23] Grosseteste, *Hexaemeron*, pp. 300f.: Cuius naturalis appetitus ad corpus administrandum inclinatur, in quo iuste et inique vivere potest, ut habeat vel premium de iusticia vel de iniquitate suplicium. Secundum igitur hunc modum exponendi, inspiracio vel insufflacio, qua inspiravit vel insufflavit Deus in faciem hominis spiritum vel flatum vite, non significat anime creacionem post corporis humani formacionem, sed eius prius facte in corpus iam factum infusionem. (The extension of this context is given above.)

processional phase, and a distinct, articulated termination was both powerful and influential.

The influence of an increasingly differentiated and articulated discussion of the artistic work, the *opus*, can be observed in contemporaneous writings concerning music. The rational background, set forth carefully, within a logical, incremental, development by Robert Grosseteste, illuminates what is written concerning music during the century under consideration. In turn, musical exemplifications, for example, of terms such as *proprietas* and *perfectio*, *ordo*, *pneuma*, and *cantus prius factus* provide new comprehensibility to abstractions. The two complement each other. A discussion which is doctrinal, expository, essentially theological in nature, explains musical examples using the same terminology and conceptual framework. The theological discussion, without musical exemplification, has to do with the beginning of the world, with sequential development, with time as a relatively abstract entity, and with man as a generality. Discussion of identical terms and concepts in writing about music bring these questions of creation and the components of the created, fashioned work into the arena of contemporary musical practice and of musical compositions themselves in the thirteenth century. This writing concerning music is no *Kompositionslehre*; it does not form a textbook containing instructions for composing music in a much later nineteenth or twentieth-century sense. Rather, essentially theological discussions gave the necessary impetus and expression to a concept of the artistic work as complete in itself. As an example of this, a music composition formed a composite which contained pre-conceived material. Together theological construct and music example changed the course of western music history within a brief period of time. Let us be more specific. Some of the evidence for this conceptual reciprocity lies in contemporary music theoretical writing, other evidence can be gained by looking closely at the compositions of this period and comparing them with earlier medieval music.

First, the concept of a musical composition as constituting an autonomous entity onto itself, that is, with a beginning, a middle processional phase, and a decisive, unequivocal conclusion, is a concept which is not to be especially observed in earlier medieval music. Chant pieces take their position from their function within the Mass, not from intrinsic qualities which lend characteristics of inauguration and completion. Medieval *cantus* constitutes a mosaic of phrases, both textual and musical, taken from various parts of scripture. There is variation, furthermore, in the presence or absence of patterns of repetition of *cantus* sections, for example, for the repetition of the complete Introit following the Psalm, or following the performance of tropes within the Introit. Hence, there is no definitive, standardized termination, no unequivocal final ending to a section of *cantus*. Further, there is no logical progression of phrases and ideas, which leads

one, inexorably, to finality. A further example of how both process and termination can be extremely variable in earlier medieval liturgical music is that considerable differences often exist, especially in terminations of pieces, even between the graduale and troper sections of the same manuscript.[24]

A set, constructed, determined sequence of internal events within a musical work is also absent from earlier medieval music, which tends to be composed in self-contained modules, often occurring either in seemingly arbitrary or variable order. Two examples of this fact of processional construction are the Epiphany *versus ad stellam faciendam*, from the Nevers source, Paris, Bibliothèque nationale nouv. acq. f. lat. 1235, in which no logical order between the modules or *centones* obtains. There is no compelling textual or musical logic for the order presented in the manuscript, no inexorable movement of narrative continuity or logical development between the *centones*. A liturgical genre, the sequence, within the mass ceremony, presents further evidence for earlier medieval processionality which is based on convening modules, or *centones*, rather than on an *ordo* as a mental construct within the mind of the creator.[25] The liturgical sequence exposes a "static style," in which the musical time-lapse appears to stay in place, to go, in a sense, nowhere.

The question arises: if self-contained musical compositions are not characteristic of earlier medieval music, do we find them during the period under discussion, that is, beginning with the first half of the thirteenth century. The answer is yes. Musical compositions containing a beginning, a distinct processional section, and a conclusive final termination appear. These are also autonomous pieces of music which do not draw either form or context from liturgical function. The *conductus* is an example of such a composition. In fact, a strong case can be made for the idea that this compositional category draws its generic specificity, its title, and its conceptual content from the fact that it describes in as many ways as possible the concept of process itself—of conduct.[26]

Not only in compositions produced during this period, but also in vocabulary applied to music, can the influence of a new *opus* concept be seen. The terms, *proprietas* and *perfectio* which identify basic dual principles in Grosseteste's discussion of *opus*, emerge in music theoretical writing.

---

[24] Little has been done on the subject of repetition of *cantus* sections; compare the "graduale" and "troper" sections of the manuscript Paris, Bibliothèque nationale nouv. acq. f. lat. 1235; cf. van Deusen, *Music at Nevers Cathedral.*

[25] For analysis of "processionality" in earlier medieval music, see van Deusen, "Narration, a Concept of History, and Medieval Liturgical Drama: An Epiphany Play Reconsidered" in: *The Harp and the Soul*, pp. 75-108; and van Deusen, "Procession without Progress: the Mastery of Static Style in the Medieval Latin Sequence" in: *The Medieval West Meets the Rest of the World. Medieval Concepts and Their Resonance with Other World Cultures* (forthcoming).

[26] Cf. "*Ductus, Tractus, Conductus*," above.

They frequently occur in the anonymous music treatise in contexts which discuss the concept of material and process.[27]

As in Grosseteste's use of the terms, their music theoretical application shows that they are contingent upon and complement one another. Again, as in Grosseteste's *Hexaemeron*, the concepts *proprietas/perfectio* are inherent within the work, and are component aspects of the work. By a work's own inherent properties, it is brought to perfection. There is, so to speak, a sense of organic unity and growth in a well-integrated work of art. Propriety and perfection, as applied in writing concerning music, refer to notation signs, as *figurae*, which, by means of their visible property and perfection bring the musical work to its own completion. The terms rely upon their theological background for a significance more profound and meaningful than convention.

One of the most startling convergences of theological structure and significance with musical exemplification and analogy is the concept of *pneuma*, the inspirational breath which infuses and vivifies a work. It is not—as Augustine, quoted within Grosseteste's commentary, states—that the material body exists lifeless until the infusion of inspirational force occurs, but, rather, life force exists prior to its informing the work. Needless to say, the inspirational work of the Spirit of God was not a new theme by the thirteenth century. But themes, in order to receive new vitality, must receive a new reason for use. Augustine's exposition on *pneuma* was well-known, no doubt, as a theological commonplace by the time of Grosseteste's commentary on the Genesis account of the creation of man. What gives this passage a new dimension is the concept of *prius factus*—of "preconceived material." The resonance in music to this concept was not far behind.[28] Compositions which were indeed composites formed of "preconceived material," with musical melodic lines possibly from more than one composer, and composed at more than one time, or in more than one stage are evident and become customary during this period. The preconceived melodic line or voice itself is, in many cases, as is shown by the example labelled *neuma*. (Example: Motet with tenor *Neuma,* Montpellier, Bibliothèque Interuniversitaire, Section Médecine MS H 196.)

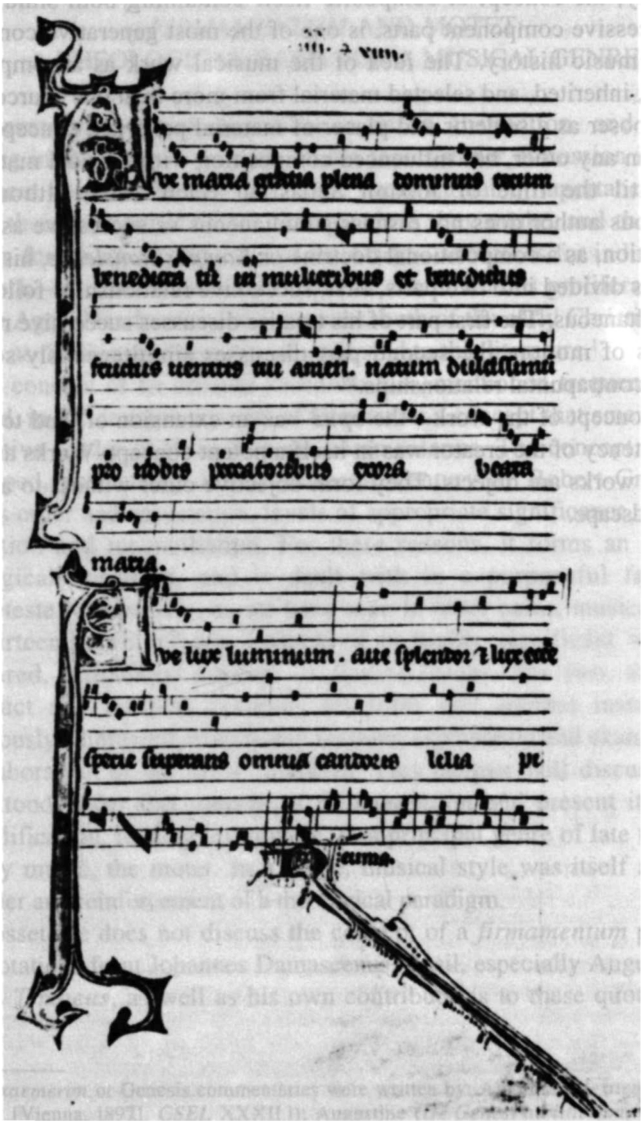
Again, the designation is largely meaningless unless the surrounding bulwark of theological tradition coming into contact with new significance

---

[27] Anonymus IV, ed., p. 25:...quod iste procedit iuxta proprietatem et perfectionem punctorum materialium, et primus sine proprietate et cum perfectione procedit...For additional uses of the pair, separately and together, see Wolf Frobenius, *Perfectio* and *Proprietas* articles in: *Handwoerterbuch der musikalischen Terminologie* (Wiesbaden, 1977ff).

[28] For a discussion of the topic of *cantus prius factus*, see "A Theory of Composition," above.

Example: Motet with tenor *Neuma,* Montpellier, Bibliothèque Interuniversitaire, Section Médecine MS H 196



is taken into consideration. The concept of *cantus prius factus*, as the basisfor composition, would continue to have currency in western music for several hundred years.

Finally, the concept of *composite* itself containing both simultaneous and successive component parts, is one of the most generative concepts in western music history. The idea of the musical work as a composite of received, inherited, and selected material from more than one source, and of the composer as a selector and placer of material parts is a concept which, more than any other, has influenced composition with musical materials at least until the time of Johann Sebastian Bach. And, although our anonymous author does not discuss simultaneous *vs* successive aspects of composition, as a compositional doctrine or *Kompositionslehre*, his treatise is divided into two parts, first, successive relationships followed by the simultaneous. The first part of his treatise discusses successive rhythmic divisions of motion; the second part discusses simultaneously-sounding tones in contrapuntal relationships.[29]

The concept of the work—the *opus*—as an extension of, and testimony to the potency of the creator was in itself a potent concept. Works are good. Finished works are objects. They form objective outer witness to a fruitful inner landscape.

---

[29] Grosseteste uses the same format in his treatise, *De cessatione legalium*; see "Law, Letter, and Time."

CHAPTER TEN

FIRMAMENTUM AND MOTET: A THEOLOGICAL BASIS FOR A MUSICAL GENRE

Generation, material, organization as an abstraction, and causality resulting in the creative process are the topics under discussion in the Old Testament book of Genesis. Given the unquestionable importance of these topics, their substantial nature, the questions they evoke, and their central position for an articulated view of the world—as well as for individual life and work—it is no wonder that Genesis commentaries proliferated in the Middle Ages. Nearly every major writer, both of the early Christian period, as well as the thirteenth century, contributed to this literature.[1]

The concept of an ordered *firmamentum*, mentioned frequently, if not stressed, in the creation account of Genesis, is a concept that emerges to the inquisitive reader of these Genesis commentaries. The concept, as it was developed, particularly in the thirteenth century by Robert Grosseteste, implies order and association, levels of appropriate significance, organized separation and reconciliation. For these reasons, it forms an important theological construct, and is dealt with in a purposeful fashion by Grosseteste. Conversely, as we have seen in other cases, musical style of the thirteenth century was influenced in highly significant ways by a structured, articulated concept of *firmamentum*. The two, theological construct and musical example, set forth still another instance of a consciously-reinforced relationship between explanation and example, using a collaboration of the *artes liberales*. This chapter will discuss aspects understood under the concept of *firmamentum* and present its musical exemplification, leading, eventually, to a principal genre of late thirteenth-century music, the motet. In a sense, musical style was itself a constant reminder and reinforcement of a theological paradigm.

Grosseteste does not discuss the concept of a *firmamentum* per se, but his quotations from Johannes Damascenus, Basil, especially Augustine, and Plato's *Timaeus*, as well as his own contributions to these quotations, do

---

[1] *Hexaemeron* or Genesis commentaries were written by: Ambrose (*Hexaemeron*, ed. C. Schenkl [Vienna, 1897], *CSEL* XXXII.l); Augustine (*De Genesi ad litteram*, ed. Josephus Zycha [Vienna/Prague/ Leipzig, 1894], *CSEL* XXVIII.l); Basil (*Hexaemeron, Eustathius: ancienne version latine des neuf homélies sur l'Hexaemeron de Basile de Césarée*, ed. Emmanuel Amand de Mendieta et Stig Y. Rudberg [Berlin, 1958]. *Texte und Untersuchungen zur Geschichte der altchristlichen Literatur*, 66, Bd. 5); Bede (*Hexaemeron, PL* XCI, *In principium Genesis*, ed. Charles W. Jones [*CCSL* CXVIIIA, IIA, Turnhout, 1967]); Jerome (*Hebraicae quaestiones in Genesim, PL* XXIII).

this for him. In any case, his method of organization, as we have noted previously, was not to systematically approach a topic, define and delineate it, and systematically move on to another. Nevertheless, when one observes the frequency with which the term occurs,the obvious importance granted to it, and the extensive quotation apparatus surrounding the use of the term,[2] one comes to the conclusion that *firmamentum*, for Grosseteste, was a concept of value and format. It was useful for his purposes.

What, exactly, are these purposes? Grosseteste was interested in reconciling important features of a tradition with new impulses. His multi-dimensional concept of *firmamentum* includes the following aspects. First, it presents a model of creation to the imagination which contains simultaneous levels of significance. Each level contains activity in terms of motion and figures within that level. These *figurae* give characteristic format to each level. This model of simultaneous strata differs in important ways from the earlier, often-expressed concept of one scriptural text which could be read in several senses. In his Genesis commentary, Augustine, for example, presents a model of paradise in which two senses are simultaneously imposed upon the text:

> Paradisus igitur neque solum literaliter neque solum figurative intelligendus est, sed literaliter simul et figurative, sicut ostendunt raciones Augustini supradicte. Significat igitur paradisus figurative ecclesiam presentem in terris et futuram in celis, sive unite totam civitatem Dei ex sanctis hominibus et beatis spiritibus collectam secundum illud in Canticis canticorum...[3]

The model of paradise, according to Augustine, should neither be considered solely in a literal sense, nor in a figurative sense, but simultaneously literally and figuratively. Figuratively speaking, paradise presents the church on earth, as well as the future church in heaven, a totality composed of the "citizens of God," that is, a collection of the redeemed and blessed spirits as is presented in the "Song of Songs." Augustine's paradise model, though understood by means of two simultaneous interpretational senses, is, however, not at all multi-layered.

---

[2] See Southern, *Grosseteste*, pp. 32-37. One passage, for example, brings together the writings of, in the order in which they are cited, Rufinus, *Comm. in Sent.*, Plato's *Timaeus*, Augustine's *De Gen. ad litt.*, *Enarrationes in psalmos*, *De lib. arb.*, *Sermones*, *Enchiridion*, *Retractiones*, Johannus Demascenus, *De fide orthod.*, Aristotle, *De Celo*, *Metaphysica*, Calcidius, *In Tim. comm.*, Avicenna, *De celo et mundo*, Macrobius, *In somn. Scipionis comm.*, Virgil, *Aeneid*, Servius, *In Vergilii aeneidos libros comm.*, Augustine, *De immort. animae*, Jerome, *Epis.*, *Contra Ioannem Hiersolymitanum*; cf. Grosseteste, *Hexaemeron*, p. 107. It is of interest that Grosseteste does not quote Abelard's Genesis commentary. This could be due to the fact that the manuscript transmission of this work was both scanty and late.

[3] Grosseteste quotes from Augustine's *De Gen.ad litt.* VIII (*CSEL*, XXVIII.l,231); see *Hexaemeron*, pp. 311f.

The projection of a simultaneous stratified creation, namely, the "firmament," is one of Grosseteste's contributions to the Genesis commentary tradition. It is also a significant conceptual departure from that tradition. Each level presents and contains figures differing by their types and rate of movement. There is organized separation, with features deliberately created to be appropriate to each level.[4] Place is designated according to highness and lowness, with temporal relationships appropriate and proportional to place. "Waters" are designated as superior or inferior; the place of the sky is superior. Each place contains various *tempora* designated by signs.[5] "Place," that is, *locus*, *ortus*, and origin, is related to motion, or *modes* of motion.[6] Qualities, or properties, of motion are suited to and appropriate to their own place. Placed between two extremes,the *superius*, with its high rate of motion, full of figures which are speedy and quick, and *inferior*, with its population of appropriate proportional figures, lies the level *in medio*.[7] The entire assemblage of *superius*, firm middle level, and

---

[4] ...simul associacionem et ordinem; see Grosseteste, *Hexaemeron*, p. 296.

[5] ...secundum varia tempora ascensionum diversorum signorum sunt dies naturales differentem quantitatem habentes; ...secundum proporcionem qua locus superior firmamento altior est loco nubium, ibidem suspendi poterunt. See Grosseteste, *Hexaemeron*, pp. 101-103. Figures, or *litere*, are related to each level: Quod satis liquet ex serie superioris litere...litera...inferior...Est igitur secundum litere huius seriem post plantacionem tercio die factam adhuc sequens ulterior terre nascentium faccio, que post primos sex dies terre nascentia complevit (Grosseteste, *Hexaemeron*, p. 297). Grosseteste discusses *place* frequently, and in various contexts, most importantly, in a context in which mission, role, and stance vis-à-vis God, himself, are determined by place. Angels participate according to place, which is another way of saying that indigenous, characteristic figures participate *in* a place. See also Grosseteste, *Hexaemeron*, p. 130.

[6] ...propter situm quem habet ceteris sex planetis excelsiorum...Ad hoc utique, ut sciamus modos possibiles quibus potest fieri ut aque veraciter supra firmamentum existant, et possimus respondere ad illos qui nituntur probare non posse esse aquas supra celos, et ostendere eis plures modos quibus potest esse hoc quod dicit Scriptura..."Sed propter substanciam superiorum, que subtilis et rara est nulloque sensu comprehensibilis habetur, firmamentum nuncupavit, comparacione scilicet corporum leviorum, que nec visu nec tactu valeamus attingere." (Grosseteste, *Hexaemeron*, pp. 103, 105; the final statement is a quotation from Basil, *Hex.*, III,7,2,[ed.pp.4lf.]). There are many passages that suggest that motions were determined by, and related to, place: Secundum vero agit etatem, quando iam obliviscitur humana et tendit ad divina; in quam non auctoritatis humane continetur sinu, sed ad summam et incommutabilem legem passibus racionis innititur, et iam per bene agendi frequentiam in bono firmatur; quo firmamento consolidato, cohibet subtus carnales motus velud aquas inferiores, et sustinet superius motus racionis in Deum velud aquas superiores (Grosseteste, *Hexaemeron*, p. 257).

[7] Deinde...supremum...firmamentum vocavit Deus celum, quod in medio aque genitum esse iussit, ordinans id separare per medium aque que erat super firmamentum, et per medium aque que erat subter firmamentum (Grosseteste, quoting Johannes Damascenus, *Hexaemeron*, p. 106, cf. Damasc. *De fide* XX,2 [pp.78f.]). *Firmamentum* itself, in some contexts, appears to be *medium*: ...et ita sit quasi quoddam firmamentum, medium inter naturalem mutabilitatem corporis, velud aquas inferiores, et mutabilitatem mentis, velud aquas superiores (Grosseteste, *Hexaemeron*, p. 256). It is important that each "level" did not have its own place, but a character based on place and motion within that place, as the *superius*, or superior level, had more vitality, shorter individual increments, and tended

inferior level form a stable, ordered structure, a mental and, indeed, actual construct, created by God, and readily apprehended because it had a basis in visible reality, as well as in ordinary experience of the physical environment.[8] Additionally, the construct of the created *firmamentum* had centuries of traditional preparation and was carefully explained by Grosseteste as he, step by step, extended and elucidated a received idea. One questions, as one notices the significances accruing to this concept of *firmamentum*, what use could and would be made of this obviously important conceptual structure.

Each level, or plane, had its own articulation, was defined by the diverse and varied figures pertinent to it. This point seems to have been an important one, as it is mentioned in several contexts and circumstances, for example:

> ...in tantas minucias possunt dividi et tantum subtiliari et aliqua vi impressi caloris vel alio modo in tantum levigari, ut super hunc aera possint vaporabiliter in nubibus suspendi, eadem racione eedem aque, minucius divise magisque subtiliate et levigate secundum proporcionem qua locus superior firmamento altior est loco nubium, ibidem suspendi poterunt.[9]

These figures, within motions, were "perseverant," "subtle and quick," or "remaining," that is, evidencing staying power, according to the place with which they were associated. A *virtus fixa et manens*, contrasted with its opposing quality, *virtus subtilians et levigans*.[10] Furthermore, these qualities were demonstrated by a plurality of modes of figures within the motion of each plane or level.[11]

---

towards prolixity: Ista et superiora sub brevitate perstringimus ad vitandum fastidium prolixitatis. Exigeret enim istorum plana exposicio ut manifestaretur per quas proprietates speciales unumquodque dictorum nominum, celi videlicet et terre, aque et abissi, inanis, vacui et tenebrosi, signaret singula suorum signatorum; quod si fieret, in non modicum volumen excresceret. Grosseteste, *Hexaemeron*, p. 79. The term *modus* is frequently used to express characters of motion:...qui modus sufficienter expressus est in superioribus. Grosseteste, *Hexaemeron*, p. 287.

[8] Quartam vero agit etatem, id ipsum quod predictum est firmius ordinatiusque faciens, et emicans in virum perfectum, aptum et idoneum omnibus persecutionibus ac mundi tempestatibus sustinendis atque frangendis; in hoc firmamento demonstrans virtutum lumina et cursus inperturbatos, quemadmodum in firmamento celi inperturbata sunt lumina, quantumcumque perturbentur hec inferiora mundi elementa (Grosseteste, *Hexaemeron*, p. 258).

[9] Grosseteste, *Hexaemeron*, p. 103.

[10] Et si virtus ea subtilians et levigans sit virtus fixa et manens, ibidem perseveranter manere poterunt. Grosseteste, *Hexaemeron*, p. 103.

[11] "Possible modes:" Ad hoc utique, ut sciamus modos possibiles quibus potest fieri ut aque veraciter supra firmamentum existant, et possimus respondere ad illos qui nituntur probare non posse esse aquas supra celos, et ostendere eis...quam ut modos possibiles ostenderent...Grosseteste, *Hexaemeron*, p. 105. "Modes of generation:" ...qui modus sufficienter expressus est in superioribus, non addit hic aliquid de eorum generacione, sed repetit et addit de generacione terre nascentium et hominis, quia nunc habent alterum modum

Characters within modes of movements, contrast with each other. Firmness contrasts with movement, perseverance with lightness and dexterity, subtlety with steadiness. Contrary motion results between planes, since each plane contained movement. But it is an imaginary motion, in as much as the movement of stars can be imagined but not experienced. This is true as well for the "movement" of the ground, described as a "movement of perseverance." Notice Grosseteste's concepts of placing, movement, and movement against the "placed" *firmamentum* in the passage which follows:

> Totum enim quod ipse dixit et demonstrare se credidit de siderum motibus, imaginari potest absque motibus celorum, licet ipse ponat firmamentum eniti contra stellas et stellas contra firmamentum. Non enim difficile est ponere aliquam virtutem intellectivam vel virtutem eciam corporalem que stellas moveat per illos circuitus quos experimentis et instrumentis adinvenit Tholomeus sive astronomi qui ipsum precesserunt sive qui ipsum subsecuti sunt. Unde Augustinus ait: Si autem stat firmamentum, nichil impedit moveri et circuire sidera.[12]

Order is apparent, even ubiquitous in its importance. These contrary motions formed by the *superius*, the perseverant *in medio*, and *inferior* find resolution in organized concord. There is a demonstrated concord of three levels. To use the conceptual language of the thirteenth century, this constitutes a reconciliation of part to part (*ex parte*) within measured duration.[13]

Interestingly, the stacking of simultaneous planes in the concept of a firmament emphasized two areas: the vertical nature of the three-plane construct—Grosseteste's contribution to the Genesis commentary tradition—and the independence of each plane. Each plane had its own individual characteristic motion. For example, light, quiet, and "beatitude" were characteristic of the *superius*—the sky, full of celestial figures.[14]

---

generacionis quam habuerunt in principio, ut distinguat modum generacionis nunc currentis a modo generacionis qui tunc erat...(Grosseteste, *Hexaemeron*, p. 287). Both the delineation of separate types of modes, and, simply, the frequency with which the term is used, show the importance of this concept in Grosseteste's explanatory system.

[12] Grosseteste, *Hexaemeron*, p. 108.

[13] ...dictum locum de perpetuitate motus ex temporis et mundi, id est eorum duracione ex parte utraque in infinitum, concorditer exponunt. Grosseteste, *Hexaemeron*, p. 59. Concerning "order": Et insuper spera stellarum fixarum; et super illam, celum sine stellis quod movet totum inferius motu simplici diurno, sicut aiunt, ita ut in universo sint novem celi: septem videlicet celi septem planetarum, et celum stellatum, et celum applanon, ex quorum numero quidam credunt se probare numerum ordinum angelicorum (Grosseteste, *Hexaemeron*, p. 108).

[14] The *superius* level: *In principio fecit Deus celum et terram* esse aliud quam firmamentum secundo die factum; et quod illud celum superius est aquis que sunt super firmamentum, nullo alio celesti corpore hoc celum primum continente; et quod in eius luce, exterius superiusque diffusa, est beatorum habitacio lucida, quieta, beata (Grosseteste, *Hexaemeron*, p. 75). Concerning the middle, stable, referential level (*tenor*), see Grosseteste, *Hexaemeron*, p. 114 in which the *firmamentum* is likened to crystal, as unmoveable between

Throughout his *Hexaemeron* commentary Grosseteste exploits and explores the connotations of the double meaning of *planus* as *plane* and *plain*—a double significance retained in the English language through identical pronunciation of two words spelled differently. *Planus*, from the Greek πλακοῦς, connotes both, in the clarity and simplicity of the single plane, and Grosseteste moves between the two meanings with purpose and ease, as in his discussion of the *superius*:

> Ista et superiora sub brevitate perstringimus ad vitandum fastidium prolixitatis. Exigeret enim istorum plana exposicio ut manifestaretur per quas proprietates speciales unumquodque dictorum nominum, celi videlicet et terre, aque et abissi, inanis, vacui et tenebrosi, signaret singula suorum signatorum; quod si fieret, in non modicum volumen excresceret.[15]

---

moving *superius* and inferior levels; p. ll5, in which the *firmamentum* is connected to the firmness of scripture (Item firmamentum est discipline sacre Scripture firma discrecio...) and to the *word* itself (*sermo*): Item firmamentum est sermo propheticus: aque superiores, hoc est priores, lex Mosaica, aque vero inferiores, hoc est posteriores, lex nova. Utramque autem legem, quasi firmamentum quoddam medium, firmat, distinguit et secernet sermo propheticus; and, again, p. ll6, to the law, or that which remains. *Firmamentum* is related to cogitation: Hoc firmamentum constitutum est medium inter cogitaciones de divinis et celestibus et cogitaciones que invigilant caducarum rerum ad humanos usus disponendarum sollicitudinis, quasi inter aquas superiores et inferiores, utrisque quod suum est providens, discernens et distribuens. Hoc firmamentum quoque firmatum est medium inter adversa et prospera; inter pugnas que afforis veniunt et timores qui deintus insurgunt; inter gloriam et ignobilitatem; inter infamiam et bonam famam. This stable level is the *tenor*, and is related to motion and time, cf. p. ll8: Turbatis igitur inferioribus et velud casualiter et sine ordine fluitantibus, celum et celestia ordinis sui tenorem nec ad momentum vel minimum deserunt. In addition, the upper level, the superius, contains more ornamentation; cf. pp. l40f: Celum autem ornatur nobilius quam terra, si conferantur ad invicem ornancium corpora. Si vero conferatur vivens non viventi, ornatus terre nobilior est ornatu firmamenti. Accedit eciam huic gracie de ornatus sui dignitate, quod ipsa conceptus suos prima protulit in lucem. A concept of "ornamentation" is contrasted with the stable, immoveable *firmamentum*.

[15] Pressed from above, we develop a distaste for the prolix, seeking, rather, plain exposition, manifested in special characteristics. See Grosseteste, *Hexaemeron*, p. 79. The juxtaposition of plane-plain connotations occur in many contexts, as in: Secundum hos igitur auctores planum est, celum primum de quo dictum est. *In principio fecit Deus celum et terram* esse aliud quam firmamentum secundo die factum; et quod illud celum superius est aquis que sunt super firmamentum, nullo alio celesti corpore hoc celum primum continente; et quod in eius luce, exterius superiusque diffusa, est beatorum habitacio lucida, quieta, beata. Grosseteste, *Hexaemeron*, p. 75. Another dimension of *plain* as a cognitive quality and principle is Grosseteste's formulation *nude cognitionis:* cognitio nuda vita est...verbum vero non efficiens quod loquitur verbum nude cognitionis. See Grosseteste, *De cessatione legalium*, pp. 184-5. Quandoque vero procedit de interiori verbo nude cognitionis sive intelligencie, et tunc verbi exterioris vita est vita semiplena, non vita perfecta, quia cognitio nuda vita est imperfecta respectu cognitionis ordinate amantis. Grosseteste, *De cessatione legalium*, p. 186. Expressions and qualifiers, such as *planus*, *plane*, *modus*, *simplex*, *evidentissime*, abound, as *In hoc sermone itaque plane exprimitur*...Grosseteste, *De cessatione legalium*, p. 112.

Planus, with the dual connotations plain/plane is contrasted with *concordia*: "Concordia autem si est in hiis, sicut verisimiliter apparet esse, non sic est evidens sed latentem, oportet perscrutabilius investigare."[16]

Concordia, therefore, is that which is not open and apparent, but latent, making thorough investigation, or a searching out of the parts that come together in concord, necessary. That which is on a level—or plane—and which can therefore be plainly ascertained does not require investigation *ex parte*, or part by part.[17] *Concordia*, in which one part of the plane, such as the superius or higher part, joins another at discrete points, brings up a vital consideration, namely, that of a pre-conceived part, or material that has been previously fabricated. This is material that has been formed: *ex aliqua preiacenti materia.*

> "In principio *fecit* Deus celum et terram." Ea enim dicuntur fieri que eciam ex aliqua preiacenti materia facta sunt. Ambe igitur translaciones ad invicem collate insinuant quod verbum creandi extenditur eciam ad ea que facta sunt ex aliqua preiacenti materia. Per hoc vero quod preterite dictum est "creavit" vel "fecit in principio," ostenditur quod ipse Creator plenitudinem essendi habuit in ipso principio, et ita quod non incepit esse a principio sed habet esse ab eterno.[18]

Formed material is contrasted with material not yet formed. The *word* itself forms material that has not yet been formed. As Grosseteste states, the word is a forming word; words grant formulation to material:

---

[16] Grosseteste, *De cessatione legalium*, p. 165. Resolution, or concord, is not plain (*plane*), rather sought after: Non igitur contraria est translacio Septuaginta nostre translacioni, sed per Spiritum Sanctum sonuit quedam vocalis dissonantia per diversos interpretes, ut quereremus et inveniremus concordiam realem et intellectualem, et ex collacione interpretacionum intelligeremus primum esse complementum operis secundum integritatem parcium ut sit; secundum vero complementum ut maneat in eo quod factum est. Grosseteste, *Hexaemeron*, p. 267. A differentiation between what is evident, and what is sought after, investigated, and inquired after, which results in the concord of contrary "motions" of interpretation—or contrary voices (*per diversos interpretes*)—is made here and in many other passages by Grosseteste.

[17] The concept *ex parte* is brought up by Grosseteste in several contexts: *duracione ex parte*, Grosseteste, *Hexaemeron*, p. 59; (*contrary parts*) Plato igitur videtur sibi ipsi contrarius, quia, ut patet ex superioribus, alicubi affirmat mundum carere inicio...quamvis a nonnullis contra quod loquitur sensisse credatur, Grosseteste, *Hexaemeron*, p. 60; (*ex serie*) Quod satis liquet ex serie superioris litere...Grosseteste, *Hexaemeron*, p. 297. For additional explication of duration *ex parte*, see above "A Theory of Composition and its Influence," n.23.

[18] Grosseteste, *Hexaemeron*, p. 67. See also for mention, again, of the concept of "preformed or preconceived material," Grosseteste, *Hexaemeron*, p. 122:...nulla adhuc preexistente potencia materiali passiva..."Dixit Deus: Fiat," ubi vero exprimenda erat potencia in materia, non passiva et receptiva solum, sed eciam inclinativa et motiva ad actum essendi, dictum est: "Dixit Deus: Congregentur, germinet, producat."...Forma enim prima concreata in materia, licet videatur inclinare materiam ad perfeccionem, non tamen videtur quod unde forma prima est inclinet materiam ad hoc vel illud esse speciale.

> Voluit enim Scriptura insinuare per verbum plenum dicentis plenam rei formacionem que verbo dicebatur. Unde, ex virtute verborum Scripture videtur aperte insinuari primo creacio informis materie ex nichilo, et consequenter ex informi materia mundi per species ordinata consummacio; non quia informis materia formatis rebus tempore prior fuerit, quia non potest materia sine formacione subsistere, sed quod naturaliter precesserit materia res ex ea formatas, sicut vox materia verborum est. Verba vero formatam vocem indicant.[19]

Preexistent, unformed material could be formed by the creative will, that is, in this situation, by God. From the inner, interior word, proceeded the exterior: "Quandoque vero procedit de interiori verbo nude cognitionis sive intelligencie, et tunc verbi exterioris vita est vita semiplena, non vita perfecta, quia cognitio nuda vita est imperfecta respectu cognitionis ordinate amantis."[20]

All of the relationships and entities, for example, *ex parte*, preexistent material, unformed, and formed material, and the inner versus the exterior, or outer word are ordered. The concepts *ordo*, *ordinate* occur far too frequently and with too much importance to be ignored.

Grosseteste's model of *firmamentum* can be summarized in the following way. It was created by a creator, consisted of many levels or planes: the sky/heavens *in superiora*, the middle level, *in medio*, or *tenor*, and the inferior level. Each level or plane was filled with various and diverse figures within modes of motions according to the level on which they were placed, and with which they participated. Another way of expressing this situation is that these *figurae* were ordered in *modes* of motion according to the character of the level, series, or part. It was possible to have contrary motion between parts, but generally, concord between individual increments of the series of figures was obtained. Together, all three constituted the *firmament*, an ordered, organized, simultaneously-functioning creation, in which preexistent material was informed, shaped, and formulated by the creator. This was achieved by the word, but *words*, as well, were evidences of formulation, of shaping, and creative forming. In this context it is important to keep in mind that *figura* and *littera* are essentially the same concept, since both are customary Latin translations of the same Greek term *schema*.[21] In other words, another term for "varied or diverse *figurae*" would

---

[19] Grosseteste, *Hexaemeron*, p. 92. "The word indeed indicates the formed voice," or, generally, the word itself indicates formation. There is the implication of verbal energy and verbal fulsomeness or plenitude, shown by the use of expressions such as *per verbum plenum, plenam rei formacionem que verbo, ex virtute verborum, vox materia verborum est.*

[20] Grosseteste, *De cessatione legalium,* p. 186. The entire lengthy passage, pp. 184-6, discusses this important concept of the relationship of the interior word to the exterior.

[21] See "Grosseteste's Concept of *Figura* and Its Application to Music Notation" above.

simply be letters, arranged, of course, in words, since words bring together varied or diverse letters.[22]

A vision of the world became a model for creation using musical "material." Not only was Grosseteste's contribution to commentary literature on the Genesis account of creation important theologically, but emphases contained within his model were explained and elucidated musically in thirteenth-century musical style, as well as in explanations of this style. We will find parallels to each tenet of Grosseteste's construct.

The vocabulary used by Grosseteste in formulating and explaining the *firmamentum* model is the most-used, therefore most important, vocabulary in the anonymous author's treatise. This vocabulary includes material, *cantus* as a level or plane of musical serial progression, or *cantus planus*, a variety of terms explaining and bringing up collection, bringing together into simultaneity, or moving in contrary motion, the concept of *superius*, as well as medium, and, especially, modes of movement. One of the most outstanding parallels between the two authors is their use of the term *mode*.

To become more specific, the anonymous author sets up the following relationships and considerations. First, the concept of sound or musical material:

> Sed distinguendum est, quod tria prima puncta distinguuntur per unum et duo coniuncta, si fuerint in diverso sono; quod si fuerint in eodem sono, non coniunguntur actuali coniunctione penes materiam, sed subintelliguntur coniungi. Alia tria coniunctim se habent semper aut actu vel intellectu penes materialem coniunctionem. Tria ultima distinguuntur per duo coniuncta actu vel intellectu et unum; iterato idem...[23]

Secondly, the vocabulary developed by Grosseteste and the anonymous author is the same. Terms signifying and giving character and shape to conceptualizations of material, levels of material, place, function, connection within place, and motion within place abound, as, for example: *circularis*, *conaliter*, *contra*, *contrarius*, *coniunctim*, *contingere*, *conversio*, *copula*, *copulare*, *copulatio*, *inferior*, *latus*, *lateraliter*, *linea*, *locus*, *medietas*, *media*, *planus*, and *cantus planus*, and especially, *a parte*.[24] To be sure, these are standard Latin words, but they are used with new frequency, in new ways, with new content and contexts. Together they form a working

---

[22] *Figurae* are treated in detail—especially the distinctive features of their stance and of their *Schriftrichtungen*. See *Anonymus IV*, ed., p. 41. The concept of *diverse figures* is frequently expressed: Et nota, quod praecedentes figurae diversimode iuxta modos diversos in labore et quiete possunt intelligi; sic etiam uti etc (ed., p. 45). In addition, *figurae* are related to levels.

[23] *Anonymus IV*, ed., p. 27. In this, as well as in other contexts, the concept of musical material is related to the dichotomy of actual *vs* intellectual perception.

[24] See F. Reckow's index of terms in: *Anonymus IV* ed., pp. 107-118.

vocabulary, in the case of the anonymous author, to describe and generally deal with a new musical style.

Thirdly, the concepts themselves, as they are used by the anonymous author, are both dependent upon and give concretization to Grosseteste's *firmamentum* system, in which material is arranged in planes with diverse figures according to place. Material is formed *a parte*, according to a part, with the implication that each "part" is horizontal and level. There are figures, appropriate to and within each level. It is important that *plane* occurs in this context:

> Figurarum simul ligatarum quaedam dicuntur cum proprietate propria a parte sui principii, quaedam sine proprietate, quaedam cum opposita proprietate etc., prout in quodam libello vel tractatu plenius invenitur, cuius inceptio est: *Habito de ipsa plana musica* etc. Et notandum, quod quaedam figurae accipiuntur sine litera et quaedam cum litera.[25]

It is the language of the quadrivial arts, a vocabulary which facilitates a discussion of levels, convening lines, diagrams, and figures. With the construct of Grosseteste's *firmamentum* in mind, the musical construct, explained in identical terminology, emerges; namely, a model of more than one *plane* of successive connected *signs* or *figures*, simultaneously presented. In other words, an imaginary picture of the world as composed of *tenor*, or firmly-held middle level; *superius*, or higher plane filled with more quickly-moving figures according to the modes of their motions; and a lower, *inferior plane*, is mirrored in the descriptions of musical style. Passages describing this style are ubiquitous. This new musical style is the actual point of the treatise, and many passages emphasize the concept of an *inferior* level, a *tenor*, and a *superius*:

> Et iste modus trium supradictorum est modus notandi coniunctim in inferioribus et in primis sive tenoribus, sed disiunctim in superioribus omnibus...Et in quantum distabat ante ipsos, minus erat cognitio talium, sed tantummodo operabantur iuxta relationem inferius ad superius, superius ad inferius, et hoc iuxta sex concordantias armonice sumptas.

The discussion not only consistently emphasizes plane, or level, and germane, characteristic degrees of time-measurement appropriate to each level, but offices, or professional identities which are based on a relationship to these levels. For example, the anonymous author writes:

> Et notandum, quod triplices sunt discantatores: quidam sunt, qui sunt plani et novi; et tales faciunt, ut praedictum est, nisi raro modo, quoniam aliquando ipsis nescientibus descendunt vel ascendunt aliter in aliam concordantiam quam in consimilem. Sunt quidam alii, qui habent in usu alium modum praedictum, et sunt veri discantatores. Sunt quidam alii, qui partem conveniunt cum primis et partem cum reliquis etc., ut in posteris

---

[25] *Anonymus IV*, ed., p. 45.

> plenius patebit. Notandum, quod triplex est modus faciendi discantum secundum veros discantatores.[26]

The anonymous author bases his entire discussion of time and its measurement upon the construct of separate and distinct levels or planes of musical syntax. Distinction is indicated by name: *superius*, or *discantus*, and *tenor*, and the designation *ex parte*, as in the following examples:

> Primo faciamus clausam vel punctum in communi horum, hoc est secundum ultimam partem, quod quidem patet sic notando ex parte tenoris...Iterato ex parte discantus...Discantus est etc., ut superius dictum est. Et notandum est, quod discantus cum tenore multas et plures considerationes habet...Alio modo a diverso ad diversum ut primus contra secundum, primus contra sextum et secundus ad sextum cum subversionibus illorum, hoc est: ponere secundum loco discantus et primum loco tenoris, vel sextum loco discantus et secundum loco tenoris.[27]

One notices the concept of the "place" of a musical "part," related to or against (*contra*) other levels. The writer proceeds with his discussion of time-increments related to each part, that is, the *tenor*, *superius*, *discantus*. Each part has its own characteristic divisions of time, indicated by diverse figures.[28] Accustomed, as conservatory-trained musicians are, to a concept of "part-writing," this carefully-constructed discussion of musical syntax based on place or level seems overly fastidious and, in short, unnecessary. However, it is a vivid example of the nature of the discussions which here articulate basic underlying principles of western musical tradition.

In this music theoretical consideration of "plane," or levels, several aspects of great importance to a thirteenth-century intellectual framework related to music emerge. They are: the concept of *via*, or *ductus*, in which points of sound are joined together in order (*ordo*), thus producing a continuous *plane* of sound. The sounds are diverse; nevertheless, a continuity is obtained. All three of these terms/concepts seem to have been absolutely essential to a discussion of musical syntax. As the anonymous author writes:

> Solus ordo sexti imperfecti, prout sub numero <tertii> potest haberi, in diminutione trium <procedit>, et hoc in duplici via secundum quod pausatio antecedit vel postcedit. Iterato solus ordo de eodem potest procedere duplici via secundum quod pausatio diversificatur in pede vel aliter secundum materiam, id est habendo respectum ad materiam, prout in secundo capitulo plenius patebit. Et nota, quod diversitas numeri ordinis punctorum

---

[26] *Anonymus IV*, ed., pp. 32, 75.

[27] *Anonymus IV*, ed., pp. 75-6; for *superius* as level cf. pp. 32, 50, 58, 59, 60, 61, 80.

[28] Figures are related to material, properties of material, and cognition: Et sic ulterius procedit per undecim, sed de proprietate et conditione materiali figurarum omnium supradictarum et postposit<a>rum. Cognitio e<a>rundem est habenda, prout in secundo capitulo postposito plenius patebit. *Anonymus IV*, ed., pp. 26-7.

> quandoque multiplex est, quandoque non, et quandoque per unicum modum ordinationis <procedit>, quando que non, sed per diversum.[29]

The levels together, as in the material world, form a concord of intervallic space which is perceived and identified, not only by sight, but by the intellect:

> Maxima pars cognitionis antiquorum fuit in praedictis sine materiali significatione, quod ipsi habebant notitiam concordantiarum melodiae completae sicut de diapason, diapente et diatesseron, sicut in quarto et quinto capitulo istius tractatus plenius continetur, prout habebant respectum superioris ad cantum inferiorem, et docebant alios dicendo: audiatis nos et retineatis et hoc canendo. Sed materialem significationem parvam habebant, et dicebant: punctus iste superior sic concordat cum puncto inferiori, et sufficiebat eis.[30]

Further, Grosseteste's extension and elaboration of the Genesis commentary tradition *firmamentum* concept, as we have seen, sets forth a concept of "preexistent material," of material available and susceptible to creative formation. It is material which can be formed, but which also forms a foundation for other added levels. Music of this period, that is, the first generation of the thirteenth century, stylistically incorporates just this concept. Categories of polyphonic music such as *organum* and the motet form their *firmamentum* of two to four levels of music using the "pre-conceived," available material of chant, *cantus*. This would have been a musical counterpart to the pre-existent material of the creation process, since the chant itself had existed as a single-level melody for several hundred years before the creation of multi-leveled polyphonic music.

Cantus, or *melodia*, as material is a concept our anonymous author was accustomed to dealing with, and used as a matter of course. The author also brings up a concept which we have seen before in Grosseteste's complete *firmamentum* construct, namely, the concept of pre-conceived or fashioned material: *Cantus vel tenor est primus cantus primo procreatus vel factus*.[31] He is alone in doing this.

---

[29] *Anonymus IV*, ed., p. 36; cf. p. 37 for a further dimension of the *via* concept, i.e. recognizable arrangements of time or "modes of time within melodies:"...de sex modis temporis melorum, prout soni vel meli integre accipiuntur vel possunt vel poterunt sumi, cum quibusdam aliis et ordinibus, prout superius dictum est.

[30] *Anonymus IV*, ed., p. 50.

[31] *Anonymus IV*, ed., p. 74. Although a contemporary, Johannes de Garlandia, uses the term "primus cantus," the anonymous author is the only one to emphasize generational principles, or the exact connotation of "pre-conceived material." *Cantus prius factus*, *cantus firmus* are mentioned around 1235, exactly the period under discussion, by, for example, Boncampagno da Signa, *Rhetorica novissima* (1235): Ego...qui cantandi artificium profiteor per artem et consuetudinem approbatam, proposui erudiendos cantum firmum et variabilem fideliter et utiliter edocere...cantum firmum regularem succentum, supprema organa et modulos variatos quoslibet fideliter edocebo, cf. Wolf Frobenius, "Cantus Firmus" in

Finally, the *firmamentum* concept with its multi-layered, but concordant, possibility for musical exemplification not only influenced, but made possible, the musical genre of the *motet* in the thirteenth century, for which an indication appears in the anonymous author's treatise. The motet formed a complete paradigm for all of the considerations we have mentioned, but its unique feature seems impossible for medieval composers to have come upon without direct recourse to a major aspect of the *firmamentum* construct. The context of the entire discussion of the *firmamentum* concept was intensely verbal and associated directly with the written *word*. Terms and connotations such as *vox*, and *materia verborum* abound in Grosseteste's *Hexaemeron* commentary. In his complete *firmamentum* construct, words themselves, by their very nature of being composed of formed figures arranged in orderly ways, indicate *formation* itself. The very presence of words indicates that something has been formed, that formation has consciously taken place.[32]

The characteristic that distinguishes the thirteenth-century motet from other genres of multi-voiced medieval music of that period, the *conductus* or *organum*, is that all of the parts or voices are "formed;" that is, they use and participate in a text. One, therefore, has a complete *firmamentum* paradigm in the motet. There is a rationale for a stationary, stable *tenor* formed of pre-conceived material,that is, *cantus*. All of the other voices, in the diverse figures appropriate to their voices, are formed as well. Each voice gives evidence of "formation" by the forming power of words. In the *firmamentum* model, words or text can be placed in an equilibrated position with formed objects, analogous to the formed objects of the created world. All of the levels, with their differing movements, figures, and texts, occur simultaneously—a constructed analogy, again, to the created world.

Several hypotheses for the invention and purpose of the medieval motet have been, through the years, advanced, the most intransigent, however problematic, being liturgical function based on the function of the liturgical tenor. Use—often appearing to be the most rational of reasons—referring to a pragmatic point of view, is, however, not the only origin of medieval musical genres. Impulses to genres in the Middle Ages are not necessarily functional, and this is one of the consistent differences between the intellectual-spiritual cultures of the early thirteenth century and our own. The difference has totally baffled music historians, who, for generations have searched for the "liturgical use" of the motet. Motets may have been sung during liturgical celebrations. Their primary purpose, however, was to exemplify relevant, traditional, yet newly-understood concepts.

Handwoerterbuch der musikalischen Terminologie. Cantus Firmus is implied in the *firmamentum* concept in terms of the tenor as the stable level.

[32] Grosseteste, *Hexaemeron*, p. 92, cited above.

Reconciliation of levels and of materials, of the superior—the sky—the earth or stable level, and the inferior levels, is mirrored in the *concordantiae* of the voices in musical style.[33] Musical style thus brought forward the pertinent theological concept and writers on music referred to this. *Reconciliation* of opposing voices is the preoccupation of the final chapters of the anonymous treatise, which closes with the salutation: "In nomine et honore sanctissimi mediatoris omnium, qui est verus salvator, Iesus Christus, filius dei vivi, et qui est corona et gloria omnium sanctorum, ad quam gloriam possumus omnes pervenire cum sanctissimo."[34]

Christ reconciled all things within himself in his dual nature of God and man. He reconciled the world to himself, and reconciled the world to God. Every aspect of the musical style of the motet can be traced to a theological principle that gave it significance, energy, and validity. (Examples 1 and 2[35])

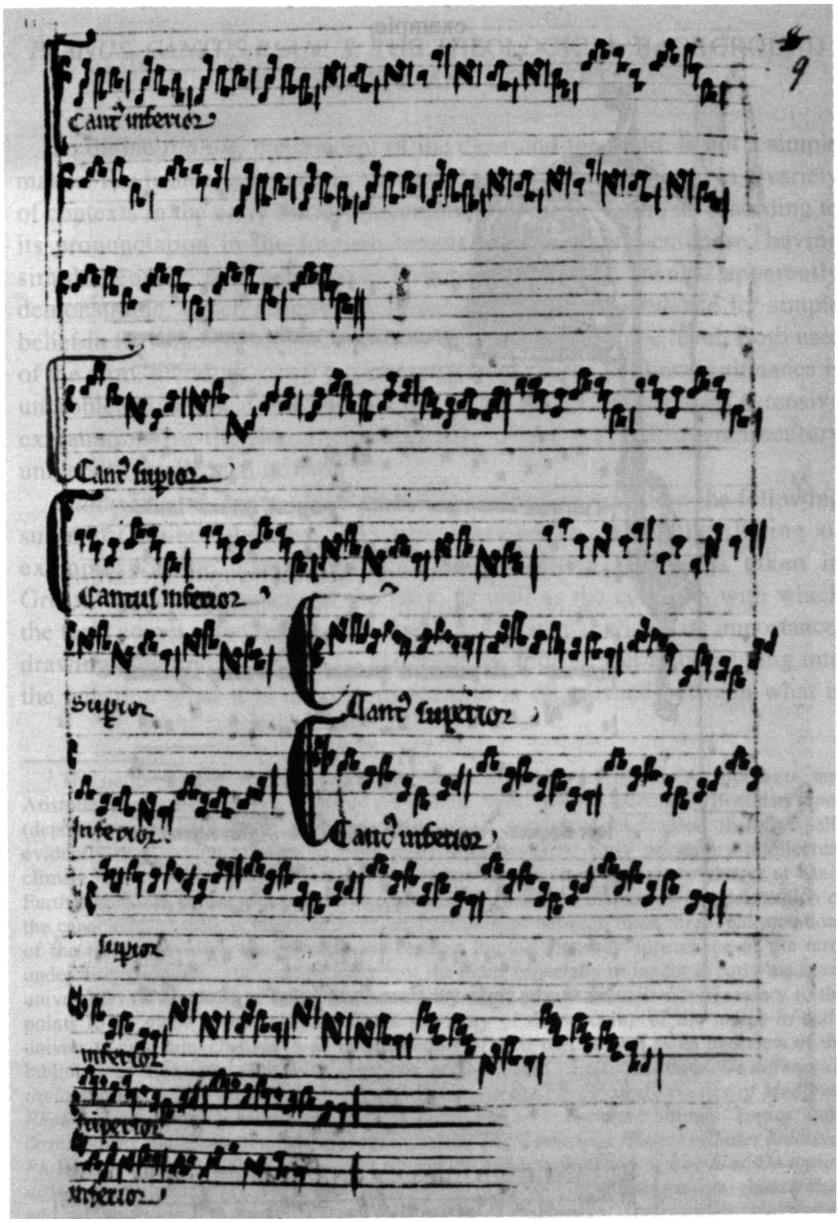
---

[33] Concordantiae organi puri regulares dicuntur unisonus et diapason, diatesseron et diapente, semiditonus et ditonus; et istae sex dicuntur primae concordantiae, et dicuntur perfectae et imperfectae <et> mediae, ut praedictum est in capitulo concordantiarum. Secundariae dicuntur quinque tantum cum unisono exclusive, et dicuntur duplex diapason, quod armonice dicitur quadrupla proportio, diapente cum diapason, quod dicitur tripla proportio, diatesseron cum diapason, quod dicitur duplum sesqui<tertium>, ditonus cum diapason et semiditonus cum diapason, ut superius in capitulo praenominato dictum est; *Anonymus IV*, ed., pp. 85-6.

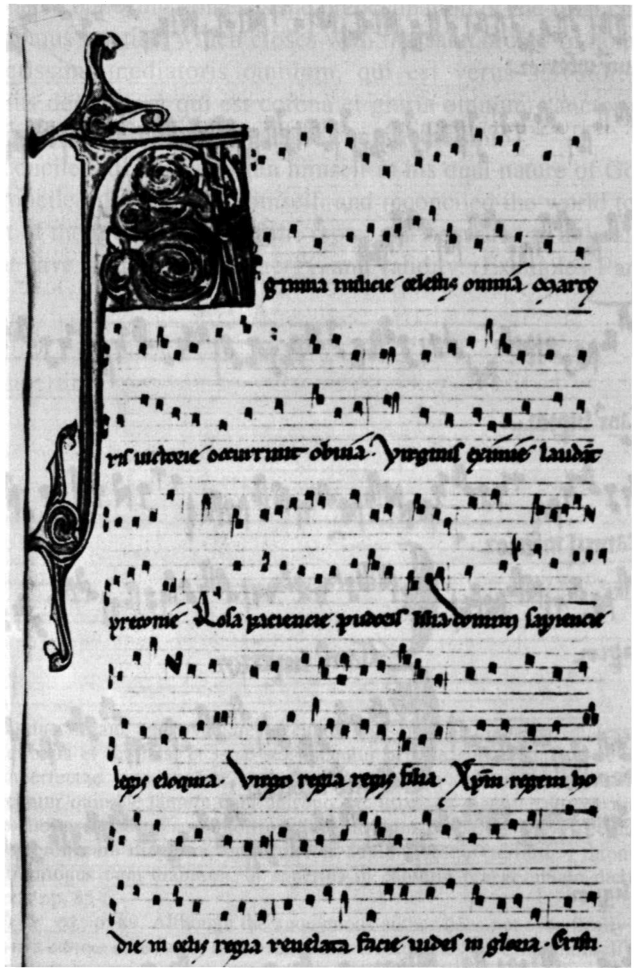
[34] *Anonymus IV*, ed., p. 89. Although the anonymous author does not specifically use the term, the motet is a *cantus coronatus*, in the sense that it reconciles, as Christ himself did, the apparently contradictory parameters mentioned above. The term deserves separate study.

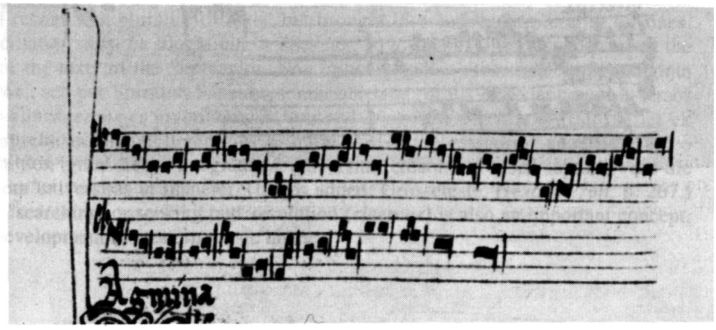
[35] The new polyphonic style demonstrated this final important possibility of reconciliation. Not only did it reconcile a plurality of texts, but brought into concord a plurality of tones. Even so, reconciliation must be sought out; it does not, so to speak, simply happen, as in the reconciliation of the texts of the Septuagint: Non igitur contraria est translacio Septuaginta nostre translacioni, sed per Spiritum Sanctum sonuit quedam vocalis dissonantia per diversos interpretes, ut *quereremus et inveniremus concordiam realem et intellectualem*, et ex collacione interpretacionum intelligeremus primum esse complementum...ut maneat in eo quod factum est. Sex igitur diebus integrata est universitas creature ut esset; septimo vero die firmata est eadem universitas ut maneret. (Italics added; Grosseteste, *Hexaemeron*, p. 267.) The concept of "searching, or seeking out" resolution (*ricercar*) is also an important concept, with a further development in western music history.

Example 1: *Cantus superior/inferior,* Anonymous English two-voiced textless composition, London, British Library Ms Harley 978, f. 8r



Example 2: Motet *Agmina milicie/Agmina,* Wolfenbuettel, Herzog-August-Bibliothek, 1206 Helmstad. 1099, ff. 123 rf: "Planes" are more obvious in cases in which melodic lines are separated visually in manuscripts, as in this example.





CHAPTER ELEVEN

PLANUS, CANTUS PLANUS: THE THEOLOGICAL BACKGROUND OF A SIGNIFICANT CONCEPT

To define *planus*, the concept of the clear and the plain, is not a simple matter. Far from unambiguous, the term is used frequently, and in a variety of contexts in the early thirteenth century. *Planus*, in Latin, as according to its pronunciation in the English language, is a double-entendre, having simultaneously two meanings: first, *plain*, or the openly, apparently demonstrable, which requires no further discussion or evidence for simple belief in its veracity;[1] secondly, *plane*, that is, placed on one level. Both uses of the term, therefore, carry the connotation of *place*. Neither significance is unproblematic, hence the frequent use of the term, together with extensive explanations in the literature, especially of the early thirteenth-century university intellectual milieu.

Planus occurs repeatedly in all of Grosseteste's works, and the following summary, rather than by any means giving an exhaustive listing of examples of the term's use, indicates definitive directions taken in Grosseteste's employment of the term, as well as the concepts with which the term comes into contact. The frequency of its use shows its importance, drawing attention to what it is, and what it signifies, but also bringing into the question what it is not. An opposition is established between what is

---

[1] The notion of *topos*, *locus*, or commonplace, as dealt with by Cicero, Boethius, and Aristotle, changed during the course of the Middle Ages. It is the essentially Boethian *topos* (dependent upon both Greek and Latin traditions), as a maximal proposition, therefore self-evidently true, which appears to have most influenced the early university intellectual climate, and it is this definition of *topos* that has resonance in the subject matter at hand. Furthermore, the sorting-out process itself, connected with the discussion and delineation of the capacities, as well as interactions of, and differences between these three interpretations of the term, provide a background and catalyst for the vigorous appearance of the term under discussion, i.e., *planus*. The subject of the topic, especially as taught at early medieval universities, is a complex one; an understanding of its permutations is not necessary to the points to be made in this chapter. For a summary of the teaching of the topics in early university curricula, changes in an understanding of their use, as well as an overview of the bibliography associated with these questions, see Michael C. Leff, "Boethius' *De differentiis topicis, Book IV*" in: *Medieval Eloquence: Studies in the Theory and Practice of Medieval Rhetoric*, ed. James J. Murphy (Berkeley, 1976), pp. 3-24; Eleanore Stump, "Topics: their development and absorption into consequences" in: *The Cambridge History of Later Medieval Philosophy*, pp. 273-299, as well as her translation and interpretation of *Boethius' De topicis differentiis* (Ithaca, 1978). The subject of arguments requiring no demonstration—hence clear and apparent—is one treated extensively in the *Metaphysics*; for example, Aristotle's statement that the demand that everything to be established must be demonstrated is an indication of ignorance (*Metaphysics*, 1006a5-18). See J. D. G. Evans, *Aristotle's Concept of Dialectic* (Cambridge, 1977), pp. 7-17.

self-evident, and what requires analysis, quantification, substantiation, and evidence. To focus on *planus* is to also bring into discussion its opposite, that which must be measured.

This Grosseteste proceeds to do, in his eloquent, energetic style. First, *planus* occupies a unique place, because it resides outside of the scheme of the four hermeneutic, interpretational senses with which scripture could be understood and explained. When God speaks concerning matters of life and death, he does so plainly. There is no question as to interpretation, no possibility of misreading or misconstruing his statement. Texts in plain speech, that is to say, *plane, in nudis verbis*, leave no doubt as to their meaning.[2] In a sense, all four interpretational modes or senses are telescoped into one within this category of statement.[3] They lie outside established systems.

These texts together form a genre of texts presented *plane*, received *simpliciter*. Grosseteste's orientation from speaker/writer to receptor changes suddenly, at times almost imperceptibly, bringing up the possibility, that not only are texts themselves inherently devoid of the necessity for analysis or supporting evidence, that is, by their nature, *plain*, but the receptor, in order to avoid error, should be stripped, immune to, or purged of his own mental fantasies, *simplice*.[4]

---

[2] See "Law, Letter, and Time" above. Grosseteste uses several expressions which differ slightly in their meanings, but fundamentally express the concept of "open and apparent," as for example, *apercius declaravit*:...itaque ignoranciam dolentes ex divina voce firmamentum esse teneamus. Cuius essencie causam, sicut dicit Basilius, "apercius declaravit Scriptura, id est, *ut dividat inter aquam et aquam*" (Grosseteste, *Hexaemeron*, p. 109); see also: Secundum hos igitur auctores planus est, celum primum de quo dictum est *In principio fecit Deus celum et terram* esse aliud quam firmamentum...Ista et superiora sub brevitate perstringimus ad vitandum fastidium prolixitatis. Exigeret enim istorum plana exposicio ut manifestaretur per quas proprietates speciales unumquodque dictorum nominum, celi videlicet et terre, aque et abissi, inanis, vacui et tenebrosi, signaret singula suorum signatorum; quod si fieret, in non modicum volumen excresceret (Grosseteste, *Hexaemeron*, pp. 75, 79).

[3] An example of such a representative statement from the category *plane, in nudis verbis* would include that from John's Gospel: For God so loved the world that he gave his only begotten Son, that whosoever believeth on him should not perish but have everlasting life (3:16), in which the historical, the allegorical, tropological, and eschatological senses are coalesced into one clear, indicative statement. Furthermore, statements and thoughts *plane*, or *simpliciter* are also situated outside the jurisdiction of the physical senses as well. Lacking either the certainty of sense reenforcement or scientific evidence, they require faith: Facillime vero ymaginabilia sunt species et forme huius mundi sensibilis...in quantum sunt extra certitudinem sensus et sciencie et venientes sub fidem, sunt simpliciter fidei magis et facilius capabiles....Species autem huius mundi, secundum quod nunc gubernantur, habent sensus et sciencie certitudinem. Secundum ordinem vero quo creabantur, non accipiuntur primo nisi per fidem (Grosseteste, *Hexaemeron*, p. 51).

[4] Grosseteste, *Hexaemeron*, p. 61: Unde et huius erroris purgacio non potest esse nisi per hoc quod mentis affectus purgetur ab amore temporalium, ut mentis aspectus immunis a fantasmatibus possit transcendere tempus et intelligere simplicem eternitatem, ubi nulla est extensio secundum prius et posterius, et a qua procedit omne tempus et prius et posterius.

Speech, or writing *in nudis*, *plane*, with *simpliciter* understanding is not always desirable, even appropriate. Figural, metaphorical language moves the mind and spirit to ardor, as love itself generates movement, as, for example, in the simile of the sacrament, writes Grosseteste:

> ...omnia ista pertinent que figurate nobis insinuantur; plus enim movent et accedunt amorem quam si nuda sine ullis sacramentorum similitudinibus ponerentur. Cuius rei causam difficile est dicere; sed tamen ita se habet ut aliquid per allegoricam significacionem intimatum plus moveat, plus delectet, plus honeretur, quam si verbis propriis apertissime diceretur. Credo quod ipse anime motus, quamdiu rebus adhuc terrenis implicatus, pigrius inflammatur; si feratur ad similitudines corporales et inde referatur ad spiritualia, que illis similitudinibus figurantur, ipso quo sit transitu vegetatur et tamquam in facula ignis agitata accenditur, et ardenciore dileccione rapitur ad quietem.[5]

To state plainly is not to have given an explanation, states Grosseteste.[6] Figural language, as well as analytical, demonstrative discussions require explanations, therefore, belong to another category. The point here is not that plain speech is always to be preferred over any other kind, but rather, that there exist categories of speech, to be used according to function, as well as mission to be accomplished. These categories are three in number: *plane*, *simpliciter*, as we have seen, figural language, in which one subject or object is substituted for another, as animals substitute for qualities, and, finally, language which brings up topics that appear to be irreconcilably opposed to one other, requiring reconciliation in order to bring into concord two antithetical lines of argument.

Let us look more closely into the resource of contexts in which *plane*, *simpliciter*, as well as other expressions of the same category occur. First, *simpliciter* is used within a context referring to internal, inherent property itself: "...ostendit prophetalis sermo quod ex paciencia et mansuetudine et simplicitate hoc fecit. Ovis enim et maxime agnus cum ad immolacionem ducitur, et cum tondetur, non rebellat nec reclamat, sed omnia sustinet in innata simplicitate et mansuetudine."[7]

The term is also used in a context implying reduction to a complete totality: "Igitur simpliciter universitatem reducere ad completam unitatem non est, ut videtur, alio modo possibile, nisi isto, videlicet ut intelligamus angelum primo creatum a Deo ex nichilo, qui non potest uniri corpori in

---

[5] Grosseteste, *De decem mandatis*, p. 36-7.

[6] Grosseteste, *Comm. in Posteriorum Analyticorum*, p. 110-11: Diffinitio eius quod est dici de omni plana est non egens explanatione; quodmodo autem ista diffinitio salvetur in demonstrationibus de his que non semper sunt, ut de elipsi, post dicetur.

[7] Grosseteste, *De cessatione legalium*, p. 99: the innate quality of *simplicitate* is shown in doves and lambs, by their ability to sustain being offered as sacrifice without protest.

unitatem persone nec participare cum corpore in aliqua unitate, nisi forte in unitate secundum genus."[8]

The substantive form, *simplex*, sets forth the concept of unity, and uniqueness, in that there are no possible analogies.[9] The concept is also related to motion, in the context of simple, unified, and continuous motions.[10] Furthermore, *planus* statements, received *simpliciter*, are stable and firm. They can be relied upon. *Sermo planus* is *sermo fixus*: "...sermo fixus habetur et stabilis, priore semper a sequente deiecto."[11]

Both *planus* and *simpliciter* occur in contexts implying knowing and knowledge profoundly acquired, or in contexts describing the objects of that knowledge, that is, principles.[12] Grosseteste applied the qualifiers *planus*,

---

[8] Grosseteste, *De cessatione legalium*, p. 130. Angels, as first-created, are unable to participate in a simple unity of person, or to participate in a unity of body, but only in the unity of their genus, that is, of angelic beings.

[9] Grosseteste, *De decem mandatis*, p. 17: De hoc eodem esse dicit etiam Augustinus *Super Iohannem*: "Cum videatis omnia ista esse mutabilia, quid 'est' quod est nisi quod transcendit omnia que sic sunt, ut non sint? Quod autem sic immutabiliter et substancialiter et per se necessario est, sicut alibi et a pluribus perfecte probatur, simplex et unum solum est et nullum compar habere potest." (Augustine, *In Iohannis evangelium tractatus* 2,2,20 [ed. D. Radbodus Willems, O.S.B., *CCSL* XXXVI, VIII, Turnhout, 1954], p. 12). A commonplace or *topos* is *simplex* in the respect that nothing can be compared to it; one cannot be compared to another, in that each is unique.

[10] Grosseteste, *Hexaemeron*, p. 118: ...et per motum unum simplicissimum et uniformissimum continuum.

[11] Grosseteste, *Hexaemeron*, p. 64, with the following context (quoted from Basil, *Hexaemeron*, I,2,2, ed. p. 5): Unde beatus Basilius ait: "Plurima super rerum natura Grecorum philosophi disputarunt, sed nullus apud eos sermo fixus habetur et stabilis, priore semper a sequente deiecto. Nichilque nobis opere precium est, que illorum sunt infirmare, cum ad destructionem propriam sibimet ipsi sufficiant."(This contrasts with Genesis itself, that is, the Word of God, which, by implication constitutes the *sermo fixus et stabilis*.)

[12] Grosseteste, *Comm. Posteriorum Analyticorum,* pp. 99f (which also refers to fixity, immutability): Hoc ist igitur simpliciter et maxime proprie scire: cognoscere causam rei immutabilem in se et inmutabilem in causando, et respectu huius scire vocat Aristoteles alios modos sciendi sophisticos et secundum accidens. Cf. further in the same extended discussion (p. 103), the connotation of completeness. There is "nothing more to know:" IV conclusio est hec: ipsis principiis primis nichil magis scitur, cuius ratio est quia oportet simpliciter scientem non esse diminutum in scientia sed completum, propterea principia prima necesse est sciri secundum utilitatem scientie. Again, in discussing universal principles (pp. 105-116), Grosseteste's employs examples from the quadrivium, concluding: His intellectis, tota littera plana est usque: *Oportet autem non latere*. Et sciendum quod ea que dicit Aristoteles supra quod per se accidentia sunt necessaria de subiectis suis et quod universalia sunt necessaria cum sint per se, non sunt hic dicta per modum demonstrative scientie, sed per modum incidentie ex diffinitionibus positis; infra autem modo demonstrativo tangentur. Finally:...Aristoteles suo more breviter, ponens ea in tribus sermonibus coniunctis in unum antecedens sic: *Quoniam autem impossibile est aliter se habere cuius est scientia simpliciter*, et quoniam resume *utique* quod est secundum demonstrativam scientiam, id est illud supra quod cadit demonstrativa scientia, necessarium est esse illud scibile, id est scibile simpliciter et maxime proprie, ut hec dictio 'illud' demonstret illud scire, quod est scire simpliciter de quo predictum est...(pp. 109-110). God, who knows all, has no need to bring into concord apparently antithetical facts or lines of reasoning, nor does he seek counsel: "Deus igitur, omnia noscens simpliciter, non consiliatur" (Grosseteste, *Hexaemeron*, p. 233, quoting

nudus, *apertius*, and *simpliciter* to knowledge in all of his principal treatises, not only in the *Hexaemeron*, and the partial commentaries on Aristotle's *Posterior Analytics* and the *Physics*, but in *De decem mandatis* and *De cessatione legalium* as well, thus making an outstanding point of this connection, but also producing a systematic treatment of the attributes of this category of knowledge, discourse, cognition, and experience, when the passages are taken from their separate settings and placed side by side.[13]

Planus statements, principles *in nudis*, or *simpliciter* cognition are powerful, as well as generational.[14] Into the constellation of meanings *planus* attracts, Grosseteste places the ideas of eloquence,[15] the beautiful, and good.[16] It would appear that *planus* evokes a verbal aesthetic arsenal in terms of vocabulary to describe what *planus* indicates, what this category signifies, and the circumstances in which the type can appropriately function. Furthermore, when considering the receptor side, that is, *simpliciter*, Grosseteste's contexts of this expression in no way imply naiveté, or simple-mindedness in a pejorative sense, that is, the primitive and ignorant. Grosseteste's *simpliciter* in no sense indicates boorishness. Although scriptural truths are received, *sine instructore*, that is to say, *simpliciter*, internal instinctive guidance by the Holy Spirit makes scripture plain:

> ...et Pauli qui didicit a Gamaliele; et consequenter exprimit quam precipue congruit sacerdoti scientia et intelligentia Scripture; et ut non sit sacerdos contentus sola rusticitate...et quia posset obici quod multi scierunt sacram Scripturam sine doctrina, utpote apostoli, respondet ad hoc quod Spiritus Sanctus in eis supplebat interiori instinctu quod alii solent recipere per exteriorem doctrinam et exercitacionem. Et quia posset quis dicere quod theologia esset sine instructore addiscibilis, tanquam scientia aliqua facilis, et precipue viro in secularibus literis excercitato, ostendit econtra,

---

Johannes Damascenus, *De fide orthodoxa*, XXXVI, 13 [ed. Eligius M. Buytaert, St. Bonaventure, N.Y., 1955, entire context, p. 138f]).

[13] See also Grosseteste, *De cessatione legalium*, p. 186: Quandoque vero procedit de interiori verbo nude cognitionis sive intelligencie...quia cognitio nuda vita est imperfecta respectu cognitionis ordinate amantis. Statements *plane*, because they require no further discussion or resolution, have a tranquillity about them.

[14] Grosseteste, *Hexaemeron*, p. 177: Significat enim simpliciter 'principium' quod potest referri tam ad inicium rei quam ad potestatis principatum; cf. (p. 153): Potest eciam terra intelligi sensus literalis Scripture, que moralis interpretacionis humili simplicitate pascit simplices, velud quibusdam herbis iumenta; and (p. 65):...et 'principium' id ex quo fit facilius, et finis ultimus et optimus 'principium' eius quod est ad finem. Simpliciter autem principium omnium dicitur divina virtus ut primum movens et efficiens omnia.

[15] Grosseteste, *Hexaemeron*, p. 26: Simplex apud eos eloquentia, non falerata rethorum facundia, sed communis cum omnibus, solum precipiens non mentiri.

[16] Grosseteste, *Hexaemeron*, p. 252: "...si qua singulatim fiunt delinquendo deformia, semper tamen cum eis universitas pulcra sit." Quelibet igitur creatura, quamdiu servat sue creacionis bonum, simpliciter in se bona est. The initial portion is taken from an extensive quotation from Augustine's *De Gen. ad litt.*, III,24 (*CSEL*, XXVIII.1,91f).

> quomodo sacre Scripture sensus occultus sit et signatus; cuius non modicum difficilis sit aditus.[17]

Grosseteste's *planus, simpliciter* then, as the term is used in all of his treatises, present an entire complex of concepts and attributions.[18] An additional aspect, of particular importance for our study, since it presents an obvious relationship to music, is that time, *simpliciter*, is related to the eternal, and, therefore, is unmeasured, nor is it subject to measure. In this way, Grosseteste sets up a dichotomy between *planus/simpliciter* and measurement, particularly of time:

> Nec intelligunt quod verbum 'coexistencie simul pleni effectus cum plena causa' implicat causam et effectum sub eiusdem generis cadere mensuram, utpote quod ambo sint temporalia, vel ambo eterna. Et in hiis quidem que participant eiusdem generis mensuram, necessaria est argumentacio supra dicta. Si autem causa et causatum non participent eiusdem generis essendi mensura, non potest eis coaptari illa regula ut dicatur: existente causa, necessario coexistit causatum. Cum igitur Deus sit eternus, mundus quoque et motus et tempus sint temporales, tempus vero et eternitas non sint eiusdem generis mensure, non habet in hiis locum illa regula de cause et causati coexistencia. Habet autem locum, ut dictum est, cum causa et causatum participant eadem mensura...Deus autem eternus causa est mundi temporalis et temporis, nec precedit ista tempore sed simplici eternitate.[19]

Grosseteste sets up an important opposition between *simpliciter* time, that is, without measurement, and time which is measured, a dichotomy to which we will return.

With regard to the initial meaning of the term, *planus* statements belong to a category onto themselves. They maintain a distinctive place, comparable to the *locus topici*, which required no further discussion or evidence. This brings up the second significance of *planus*, namely plane, level, or place. It is of interest to note that *planus* is one of the many terms absorbed directly from the Greek into the Latin language without translation. The letters were simply transliterated, the meanings directly transferred.

Aristotle's *Physics* summarizes a long philosophical tradition regarding place, as surface, exactly the significance of plane: "Hence the place of a thing is the innermost motionless boundary of what contains it...For this

---

[17] Grosseteste, *Hexaemeron*, p. 18: *Sensus occultus* in this passage would appear to constitute an opposing sense to *sensus planus* (or, in the passage which immediately follows, *evidentissime*) both forming senses outside the four-sense structure.

[18] Cf. Adam Marsh's chapter titles for the *Hexaemeron* (ed. pp. 341-350). These interpretative titles reinforce the importance, use, and attributes of *planus, simpliciter* suggested above, as, for example: Sermo in ostendendo proprietates simpliciter naturales ut ex eis eliciantur spiritales intelligencie, et sunt circiter (p. 345). Adam Marsh was a Franciscan and a close friend and associate of Robert Grosseteste.

[19] Grosseteste, *Hexaemeron*, pp. 61f.

reason, place is thought to be a kind of surface, and, as it were, a vessel, i.e., a container of the thing. Further, a place is coincident with the thing, for boundaries are coincident with the bounded."[20]

Grosseteste, when discussing place in his commentary on this section of the *Physics*,[21] states that place is made known by transmutation or change. *Movement*, in time and in space—in terms of higher and lower movement—thus, immediately enters his discussion, and infiltrates the conceptual milieu he is forming at this point.[22] Grosseteste further comments that place contains and necessitates *boundaries*, *distance*, and *material*. Place is a kind of receptacle, one vessel being distinguished from the other on the basis of material.[23] Place, itself, cannot be completely explained; being, in some respects, undemonstrable, or, better, above and beyond demonstration.[24] All of this is clearly manifest, states Grosseteste.

Finally, place is *surface*, containing "continuous signals (or signifiers of that surface), on the surface:" "Ergo per diffinicionem locus est. Cum ergo in continuo sit superficies signabilis continens partem continui..."[25]

Continuous, indivisible, circular, or returning motion, on the surface, or plane, is mentioned within the context of the entire passage. Place can also

---

[20] Aristotle, *Physics*, Book IV.4[212al] (ed. Jonathan Barnes, *Bollingen Series* LXXI.2 [Princeton, 1984]), p.361.

[21] Grosseteste never finished his commentary on the *Physics*, see the introduction to Grosseteste, *Comm. in Phys.*, ed. p. xiii.

[22] Grosseteste, *Comm. in Phys.*, ed. p. 71: *Similiter necesse est physicum et de loco sicud et de infinito considerare* et cetera. Prima conclusio ibi: Quod quidem igitur locus sit, videtur manifestum esse ex transmutacione...Ad locum vero sursum moventur levia quia locus sursum est equaliter circumstans medium in summa elongacione a medio. Res enim mota naturaliter propter has dictas disposiciones movet sursum vel deorsum plus quam ad alia loca, quod patet ei qui considerat quod gravitas est vis et inclinacio congregativa ad medium simpliciter. Levitas vero vis et inclinacio disgregativa a medio simpliciter. (It is interesting to note how frequently expressions such as *simpliciter* are used by the commentator.)

[23] Grosseteste, *Comm. in Phys.* pp. 74-5: Necessario talis locus terminus erit...Nichil remanet nisi materia sicut locus remanet absente locali. Item ex eo quod materia est receptaculum, sicud locus, videtur materiam esse locum...Ad cognoscendum enim proprietates que accidunt loco, satis est certa via et manifesta. Sed quia iste proprietates aliis conveniunt, vel convenire videntur, difficile est distinguere locum ab aliis...Materia vero non continet sed continetur pocius; et ita materia videtur pocius esse alicubi in loco et esse aliquid diversum a loco.

[24] Grosseteste, *Comm. in Phys.*, p. 76: Hoc, scilicet locus, est primo continens illud cuius est locus. Secundo supponitur quod locus nichil rei sit neque scilicet materia rei, neque forma neque pars integralis. Sed forte hoc supponitur non sicud indemonstrabile, sed sicud supra demonstratum.

[25] Grosseteste, *Comm.in Phys.*, p. 77:...id est superficies corporis continentis contigua undique superficiei corporis contenti...Ergo per diffinicionem locus est. Cum ergo in continuo sit superficies signabilis continens partem continui que nec magis nec minus continet parte signata, posset videri locus illius partis presertim cum ibidem sit posita superficies contigua. Sed sic esse est esse sicud partem in toto, non sicud aliquid in loco. Locatum enim non tantum cum loco suo movetur, sed eciam in suo loco circumvolvi potest. Pars autem in toto cui continuum est non potest circumvolvi sed solum ferri cum toto...Et hoc est decimo demonstratum ibi: *Cum quidem igitur non divisum sit continens sed continuum.*

be compared to a course (*ambitus*) of continuous motion between high and low, left and right, *ante* and *retro*.[26] Explained in this way, one sees that by its very nature, place, as described by Grosseteste, as well as by Aristotle, is incorporeal. Its dimensions are not dimensions of body, but of surface.[27]

It is of interest here that all of the qualities of *plane*, that is, containing, within limits, surface, located upon a place, in other words, perceptible horizontality arranged within significant boundaries, are all mentioned, both by Aristotle within the context of the *Physics*, and by Grosseteste in his commentary on the text. *Plane*, as in plane geometric figures, is described here.[28] Nowhere, however, is the term actually used, either in the Latin translation of the *Physics* used by Grosseteste, or in his comments on the Aristotelian text. Grosseteste used the *translatio vetus* from Greek into Latin of the *Physics*, and was acquainted with Averroes' commentary, but he wrote his own commentary at a time when he had just begun his study of the Greek language, and, furthermore, his knowledge of other Greek sources was not at all extensive.[29] Hence, he was intensely interested in new,

---

[26] Grosseteste, *Comm. in Phys.*, p. 79: Non tamen ipsa superficies ambiens habet tres dimensiones, sed intra suum ambitum et circa, sursum et deorsum loci, et dextrum et sinistrum, et ante et retro sunt necessario tres dimensiones.

[27] Grosseteste, *Comm. in Phys.*, p. 79: Id est apparet quod tale spacium sit locus in sui natura incorporeus...Locus enim cum est in racione vasis mobilis est, vas enim mobile est.

[28] For the notion of plane figures, its Greek philosophical background, as well as its musical exemplification and application, see Thomas J. Mathiesen, *Aristides Quintilianus on Music* (New Haven, 1983), pp. 39-40, 42-3, and 166: We determined two straight lines, the one comprising the first perfect number...the other first demonstrating the nature of the plane in geometry...We set forth the powers in a twofold manner: arithmetically and geometrically, because it happens that the harmonic proportion, constructed of the arithmetic and geometric proportion, is produced from both. The arithmetic proportion has terms exceeding and being exceeded by equal numbers; the geometric organizes excesses equal in their ratios one to another just as are also the terms; and the harmonic, determining the first excess from the arithmetic, engenders the second from the geometric. Since quantity is twofold, geometry, the overseer of continuous quantity, makes ratios by magnitude, comparing wholes to their parts, while the arithmetic overseer, discriminating intervallic quantity, partitioning the whole, makes combinations of parts one with another. These are the numbers underlying each proportion: the arithmetic, two, three, four; the geometric, two four, eight; and the musical, three, four, six. In choosing to demonstrate consecutively the ratios comprising the three consonances, we necessarily organize the one ratio exceeding by equal number and the other expanding by duple ratio. This is an extremely important passage, and one which summarizes a tradition, but Quintilianus was inaccessible to the Latin-reading West until the mid-seventeenth century with the translations of Marcus Meibom (*Antiquae musicae auctores septem. Graece et Latine* [Amsterdam, 1652]).The notion of plane figures is discussed in Chalcidius' commentary on Plato's *Timaeus* (ed. Waszink, p. 61): Iam ut doceat mundi corpus perfectum esse—perfecta porro corpora sunt solida quae ex tribus constant, longitudine latitudine crassitudine—, prius epipedas, hoc est planas figuras, quae longitudinem modo et latitudinem, nullam vero profunditatem habent, exponit; but Grosseteste does not mention this passage when he discusses surface.

[29] One needed to have an acquaintanceship, not only with the Greek language, but, especially in this instance, with the philosophical traditions behind this term in order to understand it as a term, that is, with specific, accrued, demonstrative connotations. By the time of Grosseteste's writing of his commentary, the *Physics* had been translated into Latin at

unaccustomed uses of terms, and intrigued with the multivalent significances Aristotle invests in old concepts, but had, at this stage, not yet acquired fluency with the language.

Nevertheless, it is this new significance of *planus*, as level surface, from the Greek meaning of *planos*, that propels the term, with renewed vigor, into the arena of musical exemplification, and unites it again with the other quadrivial arts into a relationship of complementary significance. Aristides Quintilianus, in the fourth century had summarized the Greek tradition of plane figures as bringing together in a mutually-exemplifying arrangement, arithmetic, geometry, and harmonics, or music. Aristotle's *Physics* reinserts this concept, lost during the previous centuries; the term would follow.

Anonymous IV uses it. Not only does he repeatedly use *planus* in the sense of clarity, requiring no demonstration,[30] but he gives evidence for his understanding of the term within the context of the quadrivial arts as *plane*, or level. Furthermore, the two meanings of the term converge, overlap:

> Aliter: si fuerint tria puncta, et unus ascendit et descendit vel descendit et ascendit etc., discantus debet opposito modo operari, si naturaliter habet. Et differentia est inter istos et discantatores, qui dicuntur plani cantores, quoniam plani discantatores, si tenor ascendit, et ipsi ascendunt, si tenor descendit, et ipsi descendunt; isti autem non, sed secundum modum praedictum. Et notandum, quod triplices sunt discantatores: quidam sunt, qui sunt plani et novi; et tales faciunt, ut praedictum est, nisi raro modo,

---

least four times, three times from the Greek itself, once from the Arabic. Grosseteste's commentary, influenced by Averroes' great commentary on the *Physics*, that is, with the Aristotelian text translated from Arabic into Latin, is one of the earliest commentaries on this work. It was written considerably in advance of routine study of the *Physics* at the university. Richard Dales maintains that Grosseteste, in all likelihood, never taught the *Physics*, and that it was, no doubt, a posthumous collection of his notes on it. In other words, it represented primarily his own interest in the work, and in the issues the work raised. (Cf. Grosseteste, *Comm. in Phys.*, pp. ix, xiiif.) We are dealing, then, with some first steps towards understanding several unaccustomed concepts contained within the Aristotelian repertory of concepts, among them, *planos*, used in this sense. It is of interest in this context, that, in writing concerning dimensionality, James Weisheipl, referring to the *Physics* and its commentary tradition, addresses "dimensionality" as "mathematical space," within a discussion of "void," but does not mention "plane" (cf. James A. Weisheipl, O.P, ed. William E. Carroll, *Nature and Motion in the Middle Ages* [*Studies in Philosophy and the History of Philosophy*, ll, Washington, D.C., 1985], p. 122). For an excellent summary of the Latin transmission of Aristotle's *Physics* in the Middle Ages, see Bernard G. Dod, "Aristoteles latinus" in: *Cambridge History of Later Medieval Philosophy*, p. 75.

[30] *Anonymus IV*, ed., p. 56: Et per istam figurationem intelligebant sextum modum. *Et hoc plane patet* in *Alleluia Posui adiutorium* in loco post primam longam pausationem, et quidam dicerent: post primam clausulam notarum, quod alii nominant proprie loquendo secundum operatores instrumentorum punctum, et dicerent tunc: post primum punctum *plenius patet*, aliter: ut patet in secundo puncto eiusdem *Alleluia* etc. (italics added). Expressions indicating plain demonstration, openly, clearly, and reduction to the most basic example mark the anonymous author's style.

> quoniam aliquando ipsis nescientibus descendunt vel ascendunt aliter in aliam concordantiam quam in consimilem.[31]

Both the concept of "open and apparent, that is, requiring no further explication," "and on a level, that is, plane" are brought together in this passage. Each voice plane maintains its own level; together, the *tenor* plane, the *discantus*, and the *triplum* form a concord.[32]

Without the significance newly granted to *planus* from its use in all of the quadrivial arts, the term *cantus planus* has no meaning. When both significances are understood, the term becomes full of potential. The anonymous English author is the only of his contemporaries to use the term in both senses.[33] Music "on a surface," in one place, or *plain chant*, as its English translation has it, showed clearly and plainly one musical line, in contrast to the new musical style of levels in concord. Aristotelian *plane* converges with a medieval classification and commonplace to produce—again—a musical metaphor: *cantus planus*. (Example)

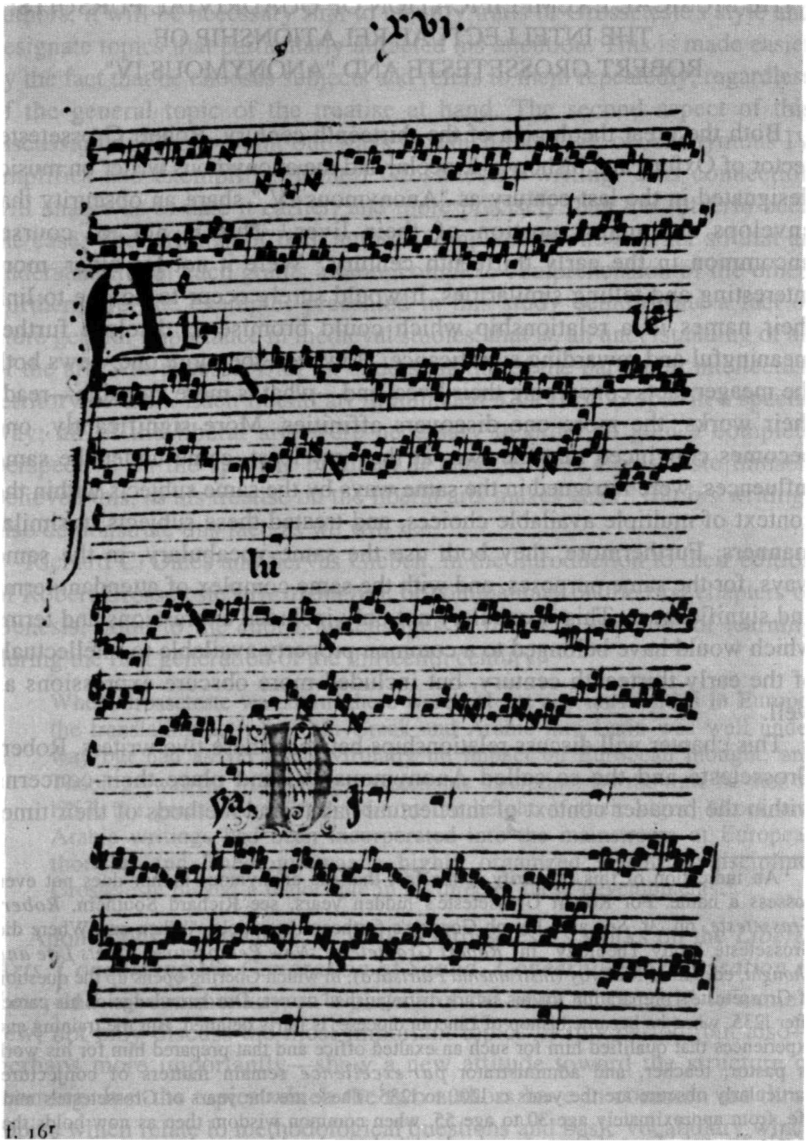
---

[31] *Anonymus IV*, ed. p. 75: In other words, if there are three *puncta*, and one ascends and descends, or descends and ascends etc., the *discantus* ought to operate in the opposite mode than would naturally be the case. And the difference between this and *discantatores*, who are said to be *plani cantores*, hence, *plani discantatores*, if the tenor ascends, and the same ascends, if the tenor descends, and the same descends, than either is nothing but according to what could be predicted. And, noting this, that the *triplices* are *discantatores*, who are [singing] on a plane and [in this respect] new, and fashioning that, as is said before, unless in a rare mode, that, knowing [how to] descend and ascend otherwise, in concord as in the rest.

[32] For the origin of this model structure, see "Firmamentum and Motet," above.

[33] *Anonymus IV*, ed. p. 50: Qua de causa fuit valde laudandus Parisius, sicut fuit magister Petrus Trothun Aurelianis *in cantu plano*. Cf. p. 60: Sed quidam antiqui ponebant punctum unum loco signi, et hoc diversimode, quod quidem nunc apud nos non est in usu. Sed in fine lineae quatuor linearum ponebant unum ut in cantu plano propter cognitionem primi puncti alterius lineae quatuor linearum. Johannes de Garlandia begins his treatise: *Habito de ipsa plana musica*, but shows no evidence of an interest in, or understanding of the quadrivial implications of the term. The term is used in contrast to *de ipsa mensurabili* (see Johannes de Garlandia, ed. p. 34).

Example: *cantus planus, Liber usuualis,* p. 409 cantus planus as cantus in 3-voiced composition Florence, Biblioteca Mediceo-Laurenziana Pluteo 29, 1, ff. 16rf



CHAPTER TWELVE

THE MUSICAL EXEMPLIFICATION OF QUADRIVIAL PURSUITS: THE INTELLECTUAL RELATIONSHIP OF ROBERT GROSSETESTE AND "ANONYMOUS IV"

Both the great theologian of the thirteenth century, Robert Grosseteste, rector of Oxford and bishop of Lincoln, and the anonymous writer on music, designated in the last century as "Anonymous IV," share an obscurity that envelops the major portion of their lives.[1] This is not, of course, uncommon in the early thirteenth century.[2] Were it not for other, more interesting and telling similarities, it would surely occur to no one to link their names in a relationship which could promise to disclose further meaningful and rewarding significance. However, the more one views both the meager facts concerning their lives, and—what is more valuable—reads their works, the more one discovers affinities. More significantly, one becomes convinced that the two, at the very least, came under the same influences, were intrigued in the same ways by the same subjects within the context of multiple available choices, and treated these subjects in similar manners. Furthermore, they both use the same vocabulary, in the same ways, for the same purposes, and with the same complex of attendant terms and significances. This vocabulary not only included expressions and terms which would have belonged to a common property available to intellectuals of the early thirteenth century, but included more obscure expressions as well.

This chapter will discuss relationships between these two writers, Robert Grosseteste and the so-called Anonymous IV, and place their concerns within the broader context of intellectual habits and methods of their time.

---

[1] An indication of this obscurity is the fact that the anonymous author does not even possess a name. For Robert Grosseteste's hidden years, see Richard Southern, *Robert Grosseteste*, pp. 3f. See also Joseph Goering's forthcoming article, "When and Where did Grosseteste Study Theology" in: *Robert Grosseteste: New Perspectives on his Life and Thought*, ed. James McEvoy (*Instrumenta Patristica*), in which Goering opens up the question of Grosseteste's preparation for his future distinguished career: Our knowledge of his career after 1235, when he became bishop of Lincoln diocese, is fairly detailed. But the training and experiences that qualified him for such an exalted office and that prepared him for his work as pastor, teacher, and administrator *par excellence* remain matters of conjecture. Particularly obscure are the years c. 1200 to 1235. These are the years of Grosseteste's mid-life, from approximately age 30 to age 55, when common wisdom then as now holds that people 'flourish.' Even if Grosseteste be described as a late-bloomer, the preparation for that blossoming should be found in his activities, interests, and accomplishments during the middle years of his career.

[2] Several have noted that earlier medieval authors themselves were not sure of each other's authorship.

Although identity, primarily of the anonymous member of the pair, is not the chief issue, a hypothesis will be advanced concerning this author's personality, activity, and approximate dates in which his work was written. In order to precisely describe common areas of interest between the two authors, it will be necessary first to identify traits of Grosseteste's style and designate topics that particularly attracted his attention. This is made easier by the fact that he chooses subjects and refers to them repeatedly, regardless of the general topic of the treatise at hand. The second aspect of this discussion will be to point out ways in which the work of Anonymous IV amplifies and exemplifies Robert Grosseteste's writing. This connection will enable us to date it earlier, and more precisely than has hitherto been the case. The writings of both authors complement one another so that an understanding of each grants a more complete comprehension of the other. Furthermore, the examples presented in this study demonstrate a fact of more general importance in medieval studies, that is, an understanding of all of the arts was necessary for an understanding of the particular intellectual territory of each. Each liberal art illuminated a facet of a topic in a special way; all of the liberal arts were necessary in order to gain a complete perspective on the specific problem at hand. Robert Grosseteste himself believed this, as his treatise on the liberal arts makes clear.[3] But his writings also demonstrate this fact, as we will see.

Richard C. Dales and Servus Gieben, in the introduction to their edition of Robert Grosseteste's *Hexaemeron*, or commentary on the first chapters of Genesis, point to the enormous changes in the very structure of learning during the first generation of the thirteenth century:

> When Grosseteste was born, there were not yet any universities in Europe; the translating activity from Greek and Arabic into Latin was well under way but had as yet made virtually no impact on European thought; and Theology was far from being a systematic discipline. By the time he died in 1253, the great universities were at the height of their vigor; Greek and Arabic writings had been incorporated into the mainstream of European thought, and Theology was a highly organized scientific discipline. Grosseteste played a major role in all three of these developments.[4]

Anonymous IV's treatise, as well as Grosseteste's works on the *Liberal Arts*, *Concerning the Generation of Sound*, *Concerning the Cessation of Law*, and his commentary on a portion of the book of Genesis, to name a few, not only discuss the most important topics of this period, but also—perhaps more importantly—show a new attitude toward the structure of learning. Just the topics which the two authors have in common are those topics which relate to methodological questions and basic vocabulary which

---

[3] See Robert Grosseteste, *De artibus liberalibus* (ed. Ludwig Baur), pp. 1-7.
[4] Grosseteste, *Hexaemeron*, p.xi.

all of the liberal arts have in common. These include the idea of *figure* as well as *varied figures*, a concept of *mode*, of rule or *ductus*, and of the intellection process itself, in which equivalency, or proportional relationships are defined and discussed. We will compare the two authors with respect to these subjects, and demonstrate how affinity of thought, frequency of occurrence, as well as similarities in style and expression lead to the conclusion that the music treatise could, in fact, have been written by Grosseteste himself.

There is one principal manuscript of the music treatise of Anonymous IV, namely, London, British Library Ms Royal 12 C.VI, which Neil Ker has dated as having been copied in the thirteenth century.[5] The manuscript was associated with the Benedictine monastery of Bury St. Edmunds—it could have even been produced at this monastery—until it was inexplicably incorporated into the collection of the Lumley family.[6] The manuscript includes an index from the library of Bury St. Edmunds, containing the following:

Folios 2r-9v *Ars notaria*
Folios 10r-11v *Vita et sententie Secundi Philosophi*
Folios 11v-12r 43 verses on conduct
Folios 12r-39v Pseudo-Aristoteles, *Liber moralium de regimine dominorum*
Folios 40r-42r *Epistola Iohannis presbyteri*
Folios 42v 19 verses on the medicinal properties of plants, diet, government (regimen)
Folios 43r-49r *Phisionomia Aristotelis*
Folios 49r-49v incomplete enumeration of Galen's works
Folios 50r-51v "Anonymous V," *De discantu*
Folios 52r-53v Fragment of a tonary, "Guidonian hand"
Folios 54r-58r "Anonymus VI," *Tractatus de figuris sive de notis*
Folios 58r Two-part French rondeau: *Faus semblaunt/Tenor de Faus semblaunt*
Folios 59r-80v "Anonymous IV," *De mensuris et discantu*
Folios 80v-81v *De sinemenis*

Several portions, indicated by the Bury St. Edmunds index, are missing, namely, *Ars memorandi*, *Modus componendi rotam versatilem*, *Tractatus de phisica*, and *Excerpta de tragediis Senece*.[7]

At first glance, the manuscript would seem to be a collection of various types of writings, that is, no particular connection between them can be established. On closer examination, however, the contents can be viewed as

---

[5] See *Anonymus IV*, ed., p. 5.
[6] See *Anonymus IV*, ed., pp. 2, 6.
[7] F. Reckow has listed the complete contents in the introduction to his edition, pp. 2-5.

parts of an overall whole, each contributing a significant dimension to the total construction of the manuscript. The themes that are presented in each treatise all pertain to motion of time, or conducting a way of life, and the related concept of rule, or regime.

The complexion of a construct of parts within a convincing whole, the date, and the place of origin all distinguish London Royal 12 C.VI from the other two sources which contain the music treatise of Anonymous IV. Both London, British Library Ms Cotton Tiberius B.IX and London, British Library Additional Manuscript 4909 are considerably later. London, Cotton Tiberius B.IX was, no doubt, bound together during the years 1571-1631, and only the two indices can be said with certainty to have come from the monastery Bury St. Edmunds.[8] London, Add. 4909 is from the eighteenth century. So, from the three sources which contain the music treatise, only one is close to the actual time and place of the writing of the treatise. London Royal 12 C.VI belonged to, or was even copied at Bury St. Edmunds, during the lifetime of Henry III. The construction of this manuscript also demonstrates the division and mutual dependency of the arts, in that each aspect both supports and adds another dimension to the understanding of a complete consideration of a given question. This differentiates not only the manuscript in question from the other two sources which contain the anonymous treatise, but the construct mentioned is found neither in earlier medieval sources, nor significantly in later manuscripts. Manuscript compilation or configuration mirrors what the disciplines themselves do: how disciplines work together to give separate aspects of the same question.

As we turn from the more external considerations of manuscript compilation to the internal aspects of content, one of the most outstanding preoccupations of both Anonymous IV and Grosseteste is the question of *figura*. One finds the word itself used frequently, and aspects of a delineated systematic account of the term's significance discussed with much emphasis. This preoccupation can be traced, in part, to the *Physica* in which Aristotle discusses geometric figures: "While geometry investigates natural lines but not *qua* natural, optics investigates mathematical lines but *qua* natural, not *qua* mathematical."

Furthermore, Aristotle, by his use of the term and significance goes into the fascinating problem of the passive content of dynamism. *Figurae* are shapes from which motion has been abstracted.[9]

Grosseteste's use of the term *figura* indicates the large panorama of the term's signification, its function as a scientific instrument—as Grosseteste

---

[8] See *Anonymus IV*, ed., p. 13.

[9] Aristotle, *Physica*, 194a10; see an extended discussion of this problem and its implications for theories of motion above.

states—as well as the writer's own interest in the term. Not only did Grosseteste devote an entire treatise to the consideration of *figurae*, especially as contiguous lines, in his treatise *De lineis angulis et figuris*,[10] but essential aspects of a comprehensive treatment of the subject occur in all of his other works. We will review aspects of this intellectual panorama, following them with significant analogous passages contributed by the anonymous writer on music, as an example of how the two writers' treatments of the same subject converge.

For one, a *figura* is the essential, characteristic disposition of an object, which renders it recognizable. In some ways figures *constrict* motion, abstracting motion (and color) from a figural construct, in other cases, they *describe* motion. The concept of *figura* is basic to all of the *artes*. Grosseteste contrasts exterior with interior *figurae* in his treatise *De generatione sonorum*:

> Et manifestum est, quod, cum ars imitetur naturam et natura semper facit optimo modo, quo ei possibile est, et ars est non errans similiter, melior autem sit repraesentatio per figuras exteriores assimilatas figuris interioribus, quam et secundum artem grammaticam, scribere erat per figuras exteriores assimilatas figuris interioribus ipsas interiores repraesentare.[11]

Outer, "external" *figurae* represent "interior" figures. Hence, *figurae* are efficacious, in other words, useful. They have clarity. Grosseteste then goes on to approach the subject of *varied and diverse figures*:

> Quod si objiciatur de diversis figuris eiusdem elementi arte inventis, non est diversitas secundum substantiam figurae, sed secundum accidentalia...dicitur a tribus linguis praedictis. Similiter figura huius elementi R in omni lingua est crispatio in figura sensibili, sicut intra formatur lingua et ita de ceteris. Sonus vocalis assimilatur sibi in toto et in parte. Necesse est ergo, ut generetur a motu assimilato sibi in toto et in parte.[12]

From a consideration of *figurae* as letters in the alphabet, to *figurae* which are diverse, not because they are substantially different, but because the diagrams of their parts are diverse (as, for example, the triangle occurring in the letter A, which may be in a different position, according to the language in which the letter occurs), Grosseteste then proceeds from *figurae* as indicators of motion—*motus rectus*, *circularis*, *dilatationis*, and *constrictionis*—to sound, and *sonus consonantis*:

> Manifestum est igitur, quod in motu, quo formatur sonus consonantis est motus et inclinatio ad formandum sonum vocalis materialis et ita in sono consonantis est sonus vocalis materialiter; est tamen sonus naturalis sicut

---

[10] Grosseteste, *De lineis angulis et figuris*, ed. Baur, p. 59ff.
[11] Grosseteste, *De generatione sonorum*, ed. Baur, p. 8.
[12] Grosseteste, *De generatione sonorum*, ed. Baur, p. 8.

> motum soni consonantis, sicut inclinatio ponderosi naturalis, cum impellitur ponderosum ex transverso, magis est de motiva inclinatio multociens quam violenta et eadem plus dat motui actuali speciem et formam, quam inclinatio naturalis.[13]

Figura, *littera*, representing inner substance, also represent motions, hence constitute the material form of sound. Therefore, the concept of *figura*, as a concept, brings together all of the quadrivial arts, and can be equated with number (arithmetic), geometric diagram (geometry), consonant sound (with application and exemplification in music), and motion (physics). It is a concept to which Grosseteste frequently refers, and which also, in the context of the quadrivial arts, occurs frequently in the anonymous music treatise.

Grosseteste's *species figurarum* includes a concept of the *punctus* as *actus in divisione* in contrast with *lineam longissimam*.[14] The concept of the *punctus/punctum* is also frequently encountered in the treatise of the anonymous author on music. For Grosseteste, as well as for the music-theoretical writer, the concept, and term, *figura*, is indispensable for any discussion of natural philosophy. Its utility, within the framework of a consideration of intellectual constructs, is unquestioned, since the relative properties [of things], as well as motions, both in action and passivity, can be made known as material to the senses—that is, to the ears as well as to the eyes.

> Utilitas considerationis linearum, angulorum et figurarum est maxima, quoniam impossibile est sciri naturalem philosophiam sine illis. Valent autem in toto universo et partibus eius absolute. Valent etiam in proprietatibus relatis, sicut in motu recto et circulari. Valent quidem in actione et passione, et hoc sive sit in materiam sive in sensum; et hoc sive in sensum visus, secundum quod occurrit, sive in alios sensus in quorum actione oportet addere alia super ea, quae faciunt visum.[15]

Grosseteste connects *figura*, as an instrument, to *signum*, and *modus*, a connection found in many contexts within the writings of the anonymous writer on music. It is of interest, that, while *figurae* extract sensory dimensions such as color, clearly setting forth essentially abstract constructs

---

[13] Grosseteste, *De generatione sonorum*, pp. 8-10: It is manifest therefore, that in motion, in which is formed consonant sound, there is motion and inclination to the forming of sound from vocal material, and that in consonant sound, sound is (becomes) material voice; it is accordingly natural sound, as well as the motion of consonant sound, that is, an inclination to natural heaviness, with violent pulsation, or more given to motion according to actual kind and form, than [is the case with]...natural inclination.

[14] Grosseteste, *Hexaemeron*, p. 100: Hec directum habet incessum, et nullo modo incedit per curvum; subito pertransit lineam longissimam. See also p. 119, for motions indicated by figures, or diagrams:...ad angulos undique equalis,...Et quelibet linea luminosa alia quanto propinquior est linee exeunti ad angulos equalis...a quolibet puncto sui dirigit....

[15] Grosseteste, *De lineis angulis et figuris*, pp. 59-60.

in order to project phenomena, they nevertheless are strongly dependent upon the senses, in terms of the visual capacity to view them. Music notational *figurae*, in addition, although they extract motion, nevertheless imply both motion and material, since they indicate sound. Music notational *figurae*, therefore, provide the most complete examples of all of the properties of *figurae*: their characteristic shape united to internal substance, utility, diversity and variety; they are comprised of contiguous lines, thus forming significant joints, they extract sensually-perceived elements, such as motion, while, at the same time reminding one of, and representing motion, and finally, their connection to time.[16] We will observe how the anonymous author brings up all of these attributes of *figura* in his discussion of recent, revolutionary developments in music notation. One affinity between the two writers lies in their treatment of circular *figurae*, and the concept of *circularity* itself.[17] The fact that this unusual topic is treated frequently and similarly by both authors is important in our consideration of the relationship between them. Grosseteste's obvious interest in cognition, the cognitive process, as well as instruments used within cognitive processes, is especially evident during the period in which he was writing his separate, shorter works on various aspects of natural philosophy. It is an interest he shares with the anonymous writer on music.

Sign, as a phenomenon, and as a tool—an instrument—is also of much interest to Grosseteste. Signs, especially, the signification of physical phenomena, are certain. They are simple, unitary, not complex, and they are unmistakable. Furthermore, signification, as a complement to cognition, is a common property of all signs.[18] Most important, for our consideration of Grosseteste as a person who is interested in, and aware of musical

---

[16] Grosseteste, *Comm. in Posteriorum Analyticorum,* p. 96: Dividitur iterum precognitio per prius et simul temporis...omnis triangulus habet tres angulos et cetera, et ex precognitione huius: hec figura descripta in hoc semicirculo est triangulus. Primum horum precognitorem multo tempore ante cognovi, secundum autem precognitorum simul tempore sensu precognovi, cum inducens ipsum in hoc universale: omnis triangulus et cetera, cognovi quoniam iste triangulus qui est in semicirculo habet tres angulos et cetera.

[17] See, for example, Grosseteste, *Comm. in Posteriorum Analyticorum,* pp. 105f: Sed via in infinitum aut est via recta aut circulatio...Si vero supra dicta via in infinitum sit circulatio, tunc quodlibet eorum que sunt in illa via est scitum per aliud, et ita est circularis demonstratio et cuiuslibet eorum est demonstratio, quod est inpossibile, sicut Aristoteles ostendit paulo post. There are many other passages which take up the subjects of circular arguments, circular *figurae*, the circular *in carmine*, and circularity, itself, as an abstraction.

[18] Grosseteste is interested in physical phenomena. Signs, for example, of wind and weather, are dispositive; they indisputably show either present conditions, or what to expect in the future. See Grosseteste, *Hexaemeron*, pp. 164-5: Nam cum fuerit tercia, si gracilis et minime cornibus obtunsis appareat, serenitatem stabilem firmamque declarat. Sin autem rubicunda pinguisque cornibus habeatur, hymbres nimios australemque violenciam minitatur. Horum igitur observacio quantum commoditatis impendat hominibus, quis ignoret? Possunt enim navigaturi intra portum retinere classem, futura pericula previdentes. Viator item cautus effectus ex celi tristicia, tranquillitatis tempus expectat...Hec igitur signa licita sunt ad considerandum, quia soliditatem habent veritatis.

phenomena, signs are useful in measuring time.[19] Signs may be corporeal or spiritual, yet there is always a spiritual element in similitude.[20] Signs demonstrate.[21]

In all of his works, Robert Grosseteste appears to be occupied with physical phenomena, and with what they are able to inform us concerning both outer and inner worlds. He is interested in the properties of light, in sound, and in the measurement of time. He expresses the concept of physical "powers:" the power of assemblage (*vis inclinativa ad congregationem*), generational and productive power,[22] operational, or performative potential, as well as a power within material property, which results in perfection.[23] We will meet this *proprietas/perfectio* duality again in the treatise of the anonymous writer on music. Grosseteste writes of power according to the principle of temporal sequence, motivational power, and of locomotive powers of "expression and perseverance."

---

[19] Grosseteste, *Hexaemeron*, p. 163: Sunt quoque luminaria signa distinctionis et numeracionis determinatarum mensurarum temporis.

[20] Grosseteste, *Hexaemeron*, p. 178: Communiter autem omnia dicta luminaria posita sunt in signa virtutem et miraculorum, tam corporalium quam spiritalium. Cf. p. 163: Ut enim ipse Augustinus testatur, ex omni creatura est per aliquam similitudinem significacio mistica trahenda.

[21] Grosseteste, *Hexaemeron*, p. 130...ut primum nomen exprimat rem et secundum nomen exprimat rei nominacionem, ut is sit sensu...Et est primum nomen significative dictum in rei designacionem, secundum vero materialiter in ipsius nominacionis rei demonstracionem.

[22] Grosseteste, *Hexaemeron*, p. 123: Facto autem celo et dirigente lumen ad celi medium quod idem est mundi et terre medium, forte ex impressione luminis indita fuit aquis, sive fuerint aque secundum speciem sive materialiter, vis inclinativa ad congregacionem, et terre, ablatis aquis, ad germinacionem. Factis vero luminaribus, ex eorum luminibus imprimebatur aquis et terre vis inclinativa ad sensibilium produccionem. See also p. 132 for the power of assemblage: Per hanc congregacionem aquarum in locum unum apparet terra triumphantis ecclesie arida; p. 133 for the power (*impetus*) of coercion (into groups): Per cohercionem quoque, qua cohibetur malignus spiritus ne temptet fideles supra id quod possunt, sicca et fructifera est terra ecclesie militantis. Nisi enim esset temptacionum ipsius impetus potestate divina cohercitus, inundaret et operiret stabilitatem ecclesie, totamque redderet ceno libidinum limosam et infecundam.

[23] Grosseteste, *Hexaemeron*, p. 122: Et forte in hiis verborum et modorum loquendi distinctionibus potest aliud quid notari, videlicet quod ubi exprimenda erat sola creantis potencia, nulla adhuc *preexistente potencia materiali* passiva, dictum est: "Creavit Deus;" ubi vero exprimenda erat solummodo materialis potencia passiva, receptiva solum, cum potencia Creatoris activa, dictum est: "Dixit Deus: Fiat;" ubi vero exprimenda erat *potencia in materia*, non passiva et receptiva solum, *sed eciam inclinativa et motiva ad actum essendi*, dictum est: "Dixit Deus: *Congregentur, germinet, producat.*"...Sed non videtur quod fuerit in eorum materia aliqua *vis inclinativa ad hoc ut hec specialiter prodirent de sua materia*. Omnis enim *vis in materia motiva et inclinativa materie* ad aliquid melius et formacius a superiori virtute impressa est...Forma enim prima concreata in materia, licet *videatur inclinare materiam ad perfeccionem*, non tamen videtur quod unde forma prima est inclinet materiam ad hoc vel illud esse speciale...Si enim locucio artificis esset *vis operatoria*...(italics added). See as well Grossesteste, *Hexaermeron*, p. 126. The writer presents these powers as "bursting forth:" Per hoc enim verbum effectum est quod vis illa a principio per tempora sequencia erumpit in suum actum. Totum igitur, eterno Verbo dicente, effectum est, videlicet vis motiva eiusque impressio et ab impressa virtute actualis et perseverans mocio.

Finally, Grosseteste frequently mentions the concept of consonance. The term constitutes a key to the intellectual work that he is attempting to accomplish, and that he considers to be central to his purposes. An indication of the importance of consonance is the many terms he uses to set forth nuances of its significance. Multiple expressions either signify or relate to concord. These include proportion, harmony, equality-equilibrium, and unity. First, concord is beautiful:

> Hec per se pulcra est, quia eius 'natura simplex est sibique per omnia similis;' quapropter maxime unita, et ad se per equalitatem concordissime proporcionata. Proporcionum autem concordia pulcritudo est; quapropter eciam sine corporearum figurarum armonia proporcione ipsa lux pulcra est et visui iocundissima. Unde et aurum sine decore figurarum ex rutilanti fulgore pulcrum est; et stelle visui apparent pulcherrime, cum nullum tamen ostendant nobis decorem ex membrorum compaginacione aut figurarum proporcione, sed ex solo luminis fulgore.[24]

It is also noteworthy that the concept of *figura*—mentioned three times in this short passage—is brought by this author into a relationship with concord.

Second, concord implies unity achieved within a binary relationship. The following passage refers to Gratian's *Decretum*, as Grosseteste describes the type of unity demonstrated by this concept of concord: "Binarius igitur, in quantum unitatem scindit, tipus est malicie que ab unitate recedit. In quantum vero recurrit in unitatem et duos unit, typus est concordie et gemine caritatis."[25]

Third, concord can be discussed with respect to signification, that is, what is most concordant is closest to what is signified. Signification always indicates a division. Concordance, as Grosseteste puts it, expresses return to the closest and nearest unity, that is, to a concord:

> Non ambiguendum est autem, Spiritus Sancti provisione factum esse ut una interpretacio adderet quod reliqua siluit; quatinus ambabus interpretacionibus collatis pateret gemina binarii *significacio, cuius primo et per se est divisio et ab unitate recessus...Qui quoque numerus item est a multitudine et divisione in unitatem et concordiam propinquissimus et vicinissimus recursus*, et ita gemine caritatis tipus, quam aspectu summi beneplaciti semper videt Deus.[26]

Fourth, concord is according to *part*. There is the possibility—even probability—of concord at certain moments. *Partes* concord: "Concordat

---

[24] Grosseteste, *Hexaemeron*, p. 99. Grosseteste is quoting from Basil's *Hexaemeron*, II,7, 10 (ed. pp. 27-28).

[25] Grosseteste, *Hexaemeron*, p. 112, cf. Gratian's *Decretum*, dist. XXVI, capp. 1-3, the only instance in this work of a citation from Gratian's *Decretum*.

[26] Grosseteste, *Hexaemeron*, p. 112 (italics added).

igitur in hac parte...ut puto, facillime consensisset....etiam in hac parte est inter eos concors discordia."[27]

Finally, most importantly for our topic, Grosseteste relates the concept of concord to sound, using sound, and music instruments as an exemplification, and placing *sound* in a proportional relationship to the concept of *concord*:

> Verba quoque predicti loci epistole ad Galathas convenienter possunt resonare et quod sensit Ieronimus et quod sensit Augustinus; quod etiam nos pro modulo nostro ostendimus in expositione parvula quam super eandem epistolam scripsimus. Nec dubitandum quia Spiritus Sancti ordinatione factum vel permissum est quod hee due fistule discordaverunt, sive ubique concorditer sive in hoc loco discordanter, quia eorum discordia et plurimorum exercuit ingenia et uterque ex alterius oblocutione mentem et sentenciam suam plenius nobis explicavit et doctrinam veritatis dilucidavit et a multis erroribus nos eripuit.[28]

Sound is such an important factor in the consideration of concord, that Grosseteste frequently employs the term-concept, *consonans*, stating clearly, *in sono consonantis est sonus vocalis materialiter*,[29] and expressly uses music as an example of what he believes to be the proper nuance of meaning for this important term Nearly all of the significances we have noted for *consonans* are contained within this passage, that is, the term itself, *consonantias*, *figura*, as well as the concepts of signification and the binary: "Pictagoras autem philosophus fuit,. qui adinvenit consonantias musicas ex percussionibus malleorum, nacione Samius, inventor 'Y', litere in cuius figuracione signavit binarium progressum humane vite."[30]

---

[27] Grosseteste, *De cessatione legalium*, p. 178.

[28] Grosseteste, *De cessatione legalium*, pp. 178f, cf. (a continuation of the same passage): Peperit igitur nobis dictarum fistularum, sive discors sive concors discordia, has et huiusmodi utilitates et concordias plurimas et ecclesie pernecessarias; again, an example of Grosseteste's propensity to use musical analogies at key points of arguments.

[29] Grosseteste, *De generatione sonorum*, p. 9, in which the concept of *consonans* is reiterated:...eo modo dicitur consonans, quasi cum alio sonans; et quasi per se non possit audiri, cum eius generatio praecedat, vel subsequatur tempore generationem vocalis; in connection with conflicting, opposing inclinations within motion: Cum autem dictam inclinationem concomitatur inclinatio aliqua ad formandum sonum consonantis, egreditur in spiritibus et instrumentis motus unus compositus proveniens a duabus inclinationibus...in ipso motus egrediens a diversis inclinationibus aliis a motu naturali...in sono consonantis est sonus vocalis materialiter; *sonus consonantis* within time: sonus consonantis non habet esse in auditu et extra os, nisi per sonum vocalis actualem. Cum enim diversum sit tempus formationis consonantis et vocalis eiusdem syllabae, necesse est, quod sonus consonantis possit formari in ore sine sono vocalis. (p. 10).

[30] Grosseteste, *Hexaemeron*, p. 20. Mention of Pythagoras and the origin of music was a commonplace; for centuries nearly every treatise on the subject of music began with, or at least included it.

Concord, for Grosseteste, was both real and intellectual, completed and maintained within itself.[31]

Because such expressions as concordance, concord and discord, consonance and dissonance are so widely-used, with little distinctive format today, the significance of these terms may be missed. Grosseteste, as Richard Southern has pointed out, had to have been a person who not only was interested in music and enjoyed it, but also understood its most profound nature as well as its technical aspects. In other words, Grosseteste was a music scientist—one who could relate music internally, with respect to its essential qualities, to the other arts of the quadrivium, and who deeply understood music's place as analogical to theological principles; who, at the same time, was completely acquainted with the most recent developments of musical style.

When we compare Grosseteste's interests with those of the anonymous writer on music, we find that they are the same, expressed according to the purpose of the anonymous treatise, that is, to elucidate, in music, basic principles. Sound was so significant to Grosseteste that he quotes himself, using the same language and examples in his commentary on Aristotle's *Posterior Analytics* and in his treatises concerning the liberal arts and the generation of sound. In these, as well as his other treatises, Grosseteste is clearly interested in the exemplification of abstract concepts through and by means of sound phenomena. This is unusual. He was obviously a person who was acutely aware of sound and the constructive, formulative competencies of music. This sensitivity to music is made even more clear if one compares Grosseteste's writing, for example, with Averroes, who emphasized the visual, and visual experience.[32] The anonymous author on music, as well, is vitally interested in sound phenomena, in music's position and aptitude as a quadrivial art, and in music's potency as a perceptible example of a given intellectual construct.[33] His use of

---

[31] Grosseteste, *Hexaemeron*, p. 267:...concordiam realem et intellectualem, et ex collacione interpretacionum intelligeremus primum esse complementum operis secundum integritatem parcium ut sit; secundum vero complementum ut maneat in eo quod factum est...Potest eciam aliter istarum interpretacionum dissonancia concordari.

[32] This is a subject for extended treatment in another context, but see some initial explorations in van Deusen, "The Paradigm of *Figura* and its Importance for an Understanding of Rhythm" in: *Paradigms in Medieval Thought: Applications in Medieval Disciplines, A Symposium*, ed. Nancy van Deusen and Alvin E. Ford (New York, 1990), pp. 65-80, especially pp. 72-76.

[33] The anonymous author is interested in physical properties, such as volume: Sunt quidam alii secundum diversa volumina (*Anonymus IV*, ed., p. 60); color: quae composuit Perotinus Magnus, in quibus continentur colores et pulchritudines...*Alleluia Dies sanctificatus* etc., in quo continentur colores et pulchritudines cum habundantia (p. 82); time, quantity, movement, space, and material, such as metal: Sed habebant regulas regulatas ex aliquo metallo duro ut in libris Cartuniensium et alibi multis locis (p. 60). The anonymous author is obviously interested in intellectual processes, in signification, and in the equivalency of sign to material: Sed in principio ponunt unum signum sicut c vel f vel g et in partibus bene ponunt d. Sed

vocabulary indicating concepts of reduction, analysis, distinction, connection, and demonstration—all intellectual tools for analysis—indicates this, an aspect which, again, forms another similarity with Robert Grosseteste.[34] A comparison of the so-called Anonymous IV with other contemporaneous writers on music, such as John of Garland, shows this to be the case.

Second, both Grosseteste and the anonymous author regarded themselves as reconciling an extensive written tradition with revolutionary new intellectual subjects, methods, and instruments. Both of them read much, and quote a great deal from other authors, sometimes identifying their sources, sometimes assuming the reader's familiarity with them. Their common objective was to summarize the entire tradition backing up, and surrounding their discussions, and bring this tradition into concord with the new learning provided by the influx of Aristotelian subject matter and methodology. This goal of reconciliation results in the following features common to both authors; first, the giving of precise information consisting of names, geographical places, and, in some cases, professional capacities,[35]

---

quidam antiqui ponebant punctum unum loco signi, et hoc diversimode, quod quidem nunc apud nos non est in usu. Sed in fine lineae quatuor linearum ponebant unum ut in cantu plano propter cognitionem primi puncti alterius lineae quatuor linearum (p. 60). Note the anonymous author's use of geometric constructs:...fac quadrangulum et alium quadrangulum iungendo conum cum cono sive angulum cum angulo lateraliter protrahendo, iterato alium quadrangulum sibi iungendo et recte supraponendo, ut in duabus ligatis superius dictum est (p. 42).

[34] The music treatise of "Anonymous IV" abounds in terms such as *frangitur*, *reducitur*, and in terms of distinction and connection, implying relationship: longam coniunctim...Sed distinguendum est, quod tria prima puncta distinguuntur per unum et duo coniuncta, si fuerint in diverso sono; quod si fuerint in eodem sono, non coniunguntur actuali coniunctione penes materiam, sed subintelliguntur coniungi (p. 27); ...bona copulatio fiet inde, sive fuerit idem in sono, sive fuerit aliquis illorum cum alio diverso convenienter sumpto ac etiam ordinato (p. 29); Et sic fiat bona copulatio, si bene ordinentur vel si poneretur ante ordinem istius punctum extra ordinem concordantem cum introitu alterius (p. 30); Distinctio patet per descriptionem eius (p. 3l); ...vel per unisonantiam sic colligendo (p.72).

[35] The *Prooemium* to Robert Grosseteste's *Hexaemeron* is filled with names and places, as well as allusions to and quotations from classical and early medieval authors (cf. *Hexaemeron*, pp. 17-48). The anonymous author, as well, mentions "diverse locations:" Sed tales libri apud organistas in Francia, in Hyspania et Ragonia et in partibus Pampiloniae et Angliae et multis aliis locis non utuntur secundum quod plenius patet in suis libris (p. 60), and is the only author to mention names of composers, for example, Perotinus, who were active in Paris ca. 1220: Et iste modus trium supradictorum est modus notandi coniunctim in inferioribus et in primis sive tenoribus, sed disiunctim in superioribus omnibus, et hoc ab illo tempore, quo homines incipiebant talia cognoscere, ut in tempore Perotini Magni et a tempore antecessorum suorum (p. 32); Et fuit in usu usque ad tempus Perotini Magni, qui abbreviavit eundem et fecit clausulas sive puncta plurima meliora, quoniam optimus discantor erat, et melior quam Leoninus erat. Sed hoc non <est> dicendum de subtilitate organi etc. Ipse vero magister Perotinus fecit quadrupla optima sicut *Viderunt*, *Sederunt* cum habundantia colorum armonicae artis; similiter et tripla plurima nobilissima sicut *Alleluia Posui adiutorium*, *Nativitas* etc. Fecit etiam triplices conductus ut *Salvatoris hodie* et duplices conductus sicut *Dum sigillum summi patris* ac etiam simplices conductus cum pluribus aliis sicut *Beata viscera* etc. Liber vel libri magistri Perotini erant in usu usque ad tempus magistri Roberti de Sabilone et in

and second, a preoccupation with proportional and consonant relationships.[36] Finally, the anonymous author, as we have seen with Robert Grosseteste, uses a concept of *figura* as part of a necessary vocabulary of terms, frequently, and in diverse contexts.[37]

The possibility that Robert Grosseteste and the anonymous author could have been one and the same writer has been suggested above.[38] Let us examine some reasons for regarding this to be the case. First, the two writers have common preoccupations and emphases which go beyond similar or even identical vocabulary. These, as we have seen, are matters of emphasis, frequency of occurrence, and observational predilection, which, although they include the use of identical terms, go beyond it, forming a conceptual nexus the two authors have in common. With respect to style, as well, it should be pointed out that Grosseteste's style did not remain the same throughout his writing career, but that it changed quite radically, depending upon the purpose of his writing, the subject matter at hand, the character of the work, and the chronological position of the treatise within

---

coro Beatae Virginis maioris ecclesiae Parisiensis et a suo tempore usque in hodiernum diem. Simili modo etc., prout Petrus notator optimus et Iohannes dictus Primarius cum quibusdam aliis in maiori parte <notabant> usque in tempus magistri Franconis primi et alterius magistri Franconis de Colonia, qui inceperant in suis libris aliter pro parte notare (p. 46, for the significance of *conductus*, see the chapter, "*Ductus*, *Tractus*, *Conductus*," above); Sed abreviatio erat facta per signa materialia a tempore Perotini Magni et parum ante, et brevius docebant, et adhuc brevius <a tempore> magistri Roberti de Sabilone, quamvis spatiose docebat. Sed nimis deliciose fecit melos canendo apparere. Qua de causa fuit valde laudandus Parisius, sicut fuit magister Petrus Trothun Aurelianis in cantu plano...Et tempore illo fuit quidam, qui vocabatur Thomas de Sancto Iuliano Parisius antiquus. Sed non notabat ad modum illorum, sed bonus fuit secundum antiquiores. Quidam vero fuit alius Anglicus, et habebat modum Anglicanum notandi ac etiam in quadam parte docendi. Post ipsos et in tempore suo fuit quidam Iohannes supradictus, et continuavit modos omnium supradictorum usque ad tempus magistri Franconis cum quibusdam aliis magistris sicut magister Theobaldus Gallicus et magister Symon de Sacalia cum quodam magistro de Burgundia ac etiam quodam probo de Picardia, cuius nomen erat magister Iohannes le Fauconer. Boni cantores erant in Anglia et valde deliciose canebant sicut magister Iohannes Filius Dei, sicut Makeblite apud Wynestriam et Blakesmit in curia domini regis H<enrici> ultimi. Fuit quidam alius bonus cantor in multiplici genere cantus et organi cum quibusdam aliis...(p. 50). In addition to a reportage of names and professions, the passage also shows the connoisseurship of the author: Boni cantores erant in Anglis et valde deliciose canebant. His interest in and understanding of music is generated in part by a sincere appreciation of it as music.

[36] Cf. *Anonymus IV*, ed., p. 74: Et notandum est, quod tria semper habere debetis in memoria: sonum vel proportionem, concordantiam et tempus et quantum temporis.

[37] Contexts containing the concept of *figura*, the figural, especially with regard to the relationship of lines to each other, and the joinings of lines, or geometric aspect abound, as: Puncta supradicta dicuntur apud quosdam notae, quare unus punctus nota vocatur; apud aliquos figurae vocantur, quare nota figura potest dici; apud aliquos simplices soni dicuntur, et sic materiali signo pro formali intelligitur etc. (p. 40f. the rest of the passage is particularly full of allusions to the figural aspect); Principium materiale tertii modi perfecti sic figuratur (p. 54); Et per istam figurationem intelligebant sextum modum...Iste vero modus figurandi crescit et decrescit per suam diminutionem sicut tertius supradictus, sed hic prima est coniuncta et ibi prima est disiuncta etc. (p.56).

[38] See "Motion Theories" above.

the corpus of his works. Furthermore, Grosseteste's style changes even within a single work. The *Prooemium* to his *Hexaemeron* commentary differs, for example, noticeably from the body of the commentary. His commentary on Aristotle's *Physics*, again, differs appreciably from his short treatises on various subjects; and his larger, more comprehensive works, such as *De cessatione legalium*, present another wholly different style, when compared to the earlier, shorter works. Although certain characteristics, such as the incorporation of an immense amount of reading, in the form of plentiful quotations, are present, there is diversity of style, as the author accommodates himself to, and deals with the material at hand. Chronological difference, as well, arbitrates stylistic differences; what are considered to be earlier treatises, written ca. 1220, are distinguishable from his later, more comprehensive works, written ca. 1235. The music treatise stylistically fits into the period of earlier works.

Joseph Goering believes that Grosseteste spent the period 1210-1215? in Paris, but without studying theology, and then returned to Paris in the 1220's in order to study both theology and the arts.[39] Anonymous IV shows just the right degree of acquaintance with composers and compositional developments in Paris—from his remarks, he indicates a lengthier stay in, but not complete assimilation, of the intellectual environment in Paris—and, in addition to his technical understanding of music, a connoisseurship based on an authentic love of music. This unique combination of technical expertise, complete understanding of music's position within the quadrivial arts, and the profound affinities music had with the other arts dealing with numerical relationships (arithmetic), conjunctive lines or diagrams (geometry), motion (physics), as well as an understanding of unique ways in which music could show the inner nature of philosophical-theological principles, all combined with a view of music as "delicious," accords well with Grosseteste's recorded life-long serious interest in music. One can go even further; Grosseteste *pursued* music, incorporating it into his life, enjoyment, and intellectual development. Furthermore, both authors have an appetite for theoretical constructs in common.[40]

For both writers, a Paris stay was crucial; in the case of Robert Grosseteste, both for theological study, as well as for musical sophistication, and for the relationship to be established between the two. As for the anonymous writer, composers who would have flourished, and

---

[39] See Joseph Goering, "When and Where did Grosseteste Study Theology?" in: *Robert Grosseteste: New Perspectives on his Life and Thought.*

[40] This is not an acquired taste; as Aristotle points out in the *Metaphysics* (II.993.bl); some have it and some do not. Furthermore, the appetite for theoretical constructs is not widespread. For an interesting comment and comparison on the subject of resistance to theory, see Brian Stock, *Listening for the Text: On the Uses of the Past* (Baltimore, 1990), pp. 54, 176.

would have been in Paris, that is between ca.1213-1222 are described in his treatise. They include Perotin, Franco of Cologne, and Johannes de Garlandia. Furthermore, the anonymous author mentions music with texts which have been attributed to Chancellor Philippe, who died in 1236.[41] This is exactly the period in which Robert Grosseteste would also have been in Paris.

One major obstacle to the association of Grosseteste with Anonymous IV from the established music historical point of view is the habit, which is without foundation, but has, nevertheless, been reinforced by uncritical repetition, of placing the anonymous treatise at the end, not middle of Henry III's reign, that is ca. 1272.[42] If any basis for this can be found, it is in the equally uncritically-accepted notion of the chronologies of two writers on music, who the anonymous author quotes, that is, especially, Franco of Cologne and Johannes de Garlandia.[43] There is, however, no evidence whatsoever to exclude periods of activity for both authors ca. 1220, nor would it have been impossible for them both to have been in Paris at that time.[44]

---

[41] For example, the text *Beata viscera Mariae* for the *conductus* cited in: *Anonymus IV*, ed. p. 46.

[42] Fritz Reckow mentions no date for the actual writing of the treatise, but gives Neil R. Ker's date of 1275, for the copying of the manuscript London, British Library Ms Royal 12 C.VI (see *Anonymus IV*, ed., p. 5).

[43] We are dealing here with inherited, basically unquestioned conceptions of the lives and works of shadowy figures. Attempts to reconstruct biographies of personalities such as Franco of Cologne have provided a showcase for music historians to display their adherence to the "great composer and work theory," in which a progression from simple to more complex style can be observed, and upon which biographies are based. Heinrich Besseler, who, in his article "Franco von Koln", *Musik in die Geschichte und Gegenwart* 4 (1955), p. 691, has influenced received impressions of "Franco of Cologne" most, maintains that Franco's music treatise should be placed ca. 1260, since this treatise forms a connection with what he regards to be the development of the motet as a music genre. (Palémon Glorieux, in his inclusion of *Françon* in *La Faculté des arts et ses maîtres au xiiie siècle*, p. 137, assumes that Besseler is correct.) Franco wrote no music, but this connection is predicated on an assumption that composers who wrote more complex motets needed certainly to know what Franco describes in his treatise. The argumentation is circular. Gilbert Reaney wrote that "a date around 1240 would not be very much earlier than the usual date attributed to Franco's treatise" ("The Question of Authorship in the Medieval Treatises on Music," *Musica Disciplina* 18 [1964], p. 13; for further nuances of the problem, and citations of the literature, see *Anonymus IV*, ed. pp. 95-6). The so-called "Franconian" treatise, which begins *Cum inquirunt de plana musica quidam philosophi* occurs as *Incipit ars cantus mensurabilis edita a magistro Francone Parisiensi* in the fifteenth-century manuscript, Milano, Biblioteca Ambrosiana D 5 inf. f. 110r (edited in Gerbert, *Scriptores* III, 1), showing a change of emphasis from the thirteenth-century *musica plana* to *cantus mensurabilis*. (*Planus* as a concept emerging in the thirteenth century is discussed above.) In short, very little is known about Franco of Cologne (*Parisiensis*),that is, where and when he lived, and whether and when he wrote a treatise on music. The accepted date of this treatise as 1260, however, has no basis in factual information, but rather on ideological presupposition.

[44] The anonymous author, however, does mention persons, such as the mathematician, Iordanus de Nemore, who definitely would have been in Paris during the period in question. Iordanus became Paris General of the Dominican order in 1222, and died in 1237.

In view of Grosseteste's musicality, as well as his keen interest in sound phenomena, which resulted in his insight into music's analogical role, and its relationship to and interaction with theological principles, it would have been astonishing if he had *not* written a treatise on music. One looks for allusions to music in Grosseteste's other works—and finds them—but the converse is also true. There are allusions to theology and the basis it forms at important points within the treatise on music, that is, at the beginning, and at its conclusion.[45]

Finally, there is a coincidence of place. Bury St. Edmunds plays a significant role in both the life of Grosseteste, and that of the anonymous author. Although the monastic community was Benedictine, whereas Grosseteste lent his sympathies to and associated with the Franciscans at Oxford, Richard Southern has suggested that the community played an important role in Grosseteste's early years, and that there is the possibility that the abbey offered him a home when he lost both parents at an early age.[46] What we do know without a doubt is that Grosseteste maintained a connection with the abbey throughout his long life, borrowed and traded books with the abbey library, and left some of his own library to the abbey when he died. The most significant, and earliest manuscript of the anonymous music treatise, now in the British Library, was owned by, and possibly came from the library of Bury St. Edmunds.[47]

Indisputable identities and biographical details are very difficult to come by in the thirteenth century. It has been suggested that this, after all, is not the most important purpose of this study. Stylistic affinities, common preoccupations and work habits, common unusual vocabulary, a congruent chronological development in which the two writers could have been at the same place at the same time, an association with the court of Henry III,[48] as well as a connection in common with the monastery of Bury St. Edmunds, although neither was a Benedictine monk, conclusive as these aspects may be, they do not form the real crux of the matter. The most important feature is this: the anonymous music treatise illustrates and exemplifies the principles that Robert Grosseteste, in one way or the other, in all of his

---

[45] *Anonymus IV*, ed. p. 22: Cognita modulatione melorum secundum viam octo troporum et secundum usum et consuetudinem fidei catholicae nunc habendum est de mensuris eorundem secundum longitudinem et brevitatem...; p. 89: In nomine et honore sanctissimi mediatoris omnium, qui est verus salvator, Iesus Christus, filius dei vivi, et qui est corona et gloria omnium sanctorum, ad quam gloriam possumus omnes pervenire cum sanctissimo. As we have mentioned before, and as is apparent as a theme throughout all of his works, Grosseteste regarded himself as a reconciliator of the old and the new, thus working in *imitatio Christi*.

[46] Southern, *Grosseteste*, p.77.

[47] *Anonymus IV*, ed., pp. 1-7.

[48] It has been suggested above that the only way that the anonymous author could have known Blakesmit, whose name he cites, and who was cantor for Henry III, would have been through close acquaintance with the king's entourage.

treatises sets forth. His priorities become perceptible in music, elusive new concepts, such as the nature of motion and contrary motions, *ductus*, *conductus*, *planus*, and *modus* all become comprehensible when translated into music. Theology, through music, could be understood.[49]

---

[49] Grosseteste emphasizes that there is a strong connection between the ideas he is setting forth and musical thought; as he states, the concepts he has been explaining extend to speculation in music: *et extendit se speculatio musicae* (see Introduction above for the entire context). It would, of course have been absurdly tedious to mention this relationship each time a point was made, such as with *quies media, consonancia, proprietas/perfectio.*

CHAPTER THIRTEEN

CONCLUSIONS

Several important barriers exist. There are profound obstacles to understanding the subject matter discussed with such vitality, vehemence, and intensity in the early thirteenth century. First, the topics presented here are interwoven; it is difficult to treat one topic without recourse to the others. In a sense the topics discussed illustrate one of the main themes, *composite*, in which parts maintain distinction, yet offer one another mutual enhancement, reciprocity, and referentiality. Separation, necessary in order to discuss each topic thoroughly, has unavoidably resulted, at times, in repetition of portions of topics, and in quotations as well.

Furthermore, the principal subjects and preoccupations of the thirteenth century university milieu are difficult, even distasteful subjects. At the very least, they are often unrecognizable in the forms given to us by thirteenth-century writers. Persons, situations, and topics, are all spiritually and intellectually removed from us. Perhaps this time-distance cannot, and will never be completely overcome. In spite of these significant barriers, the topics discussed in the early university milieu were of major importance then, and remain so today. These topics include signification, cognition, perception, intellectual and concrete material, and how to deal with it in terms of analysis; and the nature of evidence, as well as demonstration. All of these topics could be shown to have a relationship to life and its patterns. Aristotle's methods were applied to, or synchronized with, long-standing traditional treatments of these problems. In some cases the results were revolutionary, in others they resonated with received concepts, or were gradually absorbed, slowly mutating lines of investigation. The concept of *mode*, for example, was revolutionized by an Aristotelian concept of *partes*, indicated by *figurae*, within a composite.

Each one of these areas, understandably, because of its complexity, has attracted a large and significant literature. It would have been impossible, at the least, extremely awkward, to attempt to incorporate all or even most of the nuances of discussions having to do with each topic. Rather, a course has been attempted of steering a clear way through the complexities of thirteenth-century philosophical argumentation in order to show how main topics influenced Robert Grosseteste and the anonymous English writer on music, and how each writer's work coalesced with and complemented the another. In some cases this line of investigation simplifies some exceedingly difficult and complex problems of early thirteenth-century philosophy, since writing concerning music tended to skim off, so to speak,

concepts with the most format and clearest characteristics. Concepts treated by music theoretical writing, as they were further exemplified in musical style, were distinct concepts, described, in several cases, by Aristotle as being of greatest importance.

But not only are these unfamiliar topics, but the methodology employed in dealing with them is at the same time foreign and relatively uninteresting, for the most part, to us. Grosseteste, for example, uses etymology as methodology. He firmly believes that words themselves—their sounds as well as slight mutations in sound, indicated their meanings.[1] The use of etymology as a scientific methodology indicated a traditional relationship toward doing scientific work, and formed a tradition reaching back to Cassiodorus and Isidore of Seville. The authoritative power of etymology as a method, as well as the results that followed from this method were unquestioned. One is inclined to ignore it as a significant intellectual method,[2] but if we are to take the intellectual culture of the early university seriously, we must respect their methods of doing intellectual work.

This early university milieu, particularly with respect to music as a discipline, has been misconstrued. Questions asked have not been appropriate to music's place and function within the curriculum. The modern university situation has been assumed without critical investigation, in that one has looked for a separate curriculum of music studies, leading to a degree in music, and for evidence of professional music training within the university. This is an anachronism, and it is no wonder that no such music curriculum has been found. But this should by no means lead us to assume that music had no place in the intellectual life of the early university. On the contrary, music was absolutely essential for understanding the basic concepts that formed a foundation for all of the disciplines. Poised, as light, between the abstract and concrete, music, both by means of its sound phenomena, as well as visually, in notation, was capable of making philosophical principles comprehensible. No other mission could be so dignified, no other challenge could be so important, no other goal—successfully completed—so useful.

Music's particular competency, as an analogical discipline, ministering to the other arts by means of its exemplary capacity, necessitated notational

---

[1] See, for example, "Grosseteste's Concept of *Figura*," above, which indicates Cassiodorus' use of etymology as a final arbitrator of reality.

[2] The term, for example, is not to be found in the index of *The Cambridge History of Later Medieval Philosophy*. If one is in any doubt as to the validity of this method for Grosseteste, however, one should read the *Prooemium* to his *Hexaermeron* commentary, ed. pp. 17-48. See also p. 22, in which Grosseteste uses the progression from *achademia* to *gingnasium* to *Hyberia* to *Gallia*, using names to form a logical connection between figure, place, and country. He argues that there is a logic of name.

figurae, which, as the *figurae* of numbers for arithmetic, the *figurae* of diagrams for geometry, and the more abstract *figurae* of bodies in motion for physics, made particulars, relationships, and motion plain. Music notational *figurae* actually demonstrated the essence of motion. This is the reason why music notation is so important to writers on music in the thirteenth century.[3]

Robert Grosseteste and the anonymous English writer of the first generation of the thirteenth century offer a paradigmatic situation for understanding music's particular competency. We have seen how this operates. In each case, Grosseteste offers a thorough, carefully-worked out, extensive background for a concept, either from one of his works, or brought together, aspect by aspect, from many sources. In every case, although the conceptual framework is extensive, a cogent example is needed to grant the proper degree of comprehensibility. This is supplied through music style itself—as in the case of resolution within motion and the nature of motion, exemplified in the contrary motions of simultaneous musical lines resulting in a polyphonic music—through music genres, such as the *conductus* which illustrates single event occurring within continuous time-lapse; through the music composition itself, illustrating the concept of *composite*, or through music analysis using the analytical tool of the separate generational modes of rhythmic motion. Modes illustrate sources of motion as well as the basic concept of *mode*, characteristics of which are made known by *figurae*. Further, the rediscovered concept of *plane*, as a level dimension of a multi-layered structure is illustrated musically in *cantus planus*. Each important concept used in explanations of rationality itself finds appropriate exemplification within a musical analogy. These musical

---

[3] Several reasons have been advanced during the course of this century for the phenomemon of music notation in the thirteenth century. These include, more recently the view that music notation stabilizes, or "fixes" music performance, and this was seen in the thirteenth-century as desirable (pragmatic theoretical point of view), that it was invented by the composers, Leonin and Perotin, or discovered by Franco of Cologne (great composers-great works theory), that it developed, together with compositional style, during the course of the late twelfth-early thirteenth century to include, toward the end of the thirteenth century, rhythmic distinction (organic, evolutionary model). These views of music notation document, one by one, the major theoretical trends of the twentieth century, but they have little to do with the thirteenth—with the vocabulary used, the concepts expressed, or the relationships cultivated in this century.(See Jacques Handschin, "Zur Geschichte von Notre Dame" *Acta Musicologica* 4 (1932), p. 12; H. Tischler, "New Historical Aspects of the Parisian Organa", *Speculum* 25 (1950), p. 31, and "Perotinus Revisited" in: *Aspects of Medieval and Renaissance Music. A Birthday Offering to Gustave Reese*, ed. Jan La Rue (New York, 1966), p. 803, in which the development of "Notre-Dame" style is outlined as successive "Revision of the *Magnus liber*, Preponderance of discant style, creation of more complicated tenor patterns, creation of the six rhythmic modes, creation of the organa tripla, of three-part conducti, of the early Latin two-part motet, of the conductus-motet, of the four-part conducti, and the composition of the organa quadrupla." Recent discussions of thirteenth-century music style and theoretical sources have not substantially changed any of these theoretical bases.

examples, too, are fashioned to illustrate the concepts they exemplify, and the converse is also true: music style makes the exemplified concepts plain. It is a system of mutual reinforcement.[4]

We know very little generally about medieval music education. What has been reported as medieval learning in early universities constitutes the structures, situations, and perceived attitudes familiar to us to day. These include the structure of the university as containing separate disciplines and curricula, the situation of the teacher and student taking notes, and an attitude toward learning predicated upon pursuing professional goals. Further, medieval disciplines have not been taken seriously, since they are not the disciplines of contemporary humanities faculties. Hence disciplines which have emerged with vigor during the course of the last two centuries, that is, the history of literature, and the histories of art and music, have replaced medieval disciplines, in which the nature of music, related at its core, and within the signs of its very essence to arithmetic, geometry, and physics had a prominent place.[5] The disciplines themselves, the structure of

---

[4] It is not by chance that new, multi-tiered musical style, as well as the motet, appear during the period under discussion..This has been explained, again, by composers' ingenuity, and by the "school" of Notre-Dame, for which there is no evidence. William G. Waite, in *The Rhythm of Twelfth-Century Polyphony*, p. 7, writes: "To Leonin must be ascribed a position equivalent to that of Monteverdi and Haydn, men who almost singlehandedly created out of existing musical categories new styles and new forms that were to become the dominant characteristics of a new age." Craig Wright, in *Music and Ceremony at Notre-Dame of Paris, 500-1550* (Cambridge, 1989), again raises the question of the identity of Notre-Dame composers, that is, *who* is the composer who began to create polyphonic music in Paris? In view of how much more is available today, especially in terms of manuscripts, indices, and editions, as well as the interpretation of these, thus enabling one to describe the intellectual climate of this period of the Middle Ages, it is the wrong question.

[5] The place of music within the quadrivial arts, and the ways in which these four arts complemented and explained one another can be seen by this example, in which a concise reason within the discipline of physics is given exemplification in music. The *regulae* in Aristotle's *Physics*, commentated upon by Grosseteste are: *Quod movetur dividitur tripliciter*: Deinde dividit motum similiter in tria...Requiruntur hec tria ad diversum motum: et quod movetur et tempus in quo movetur...(*Comm. in Phys.*, ed. p. 106); in the anonymous music treatise: Insuper si quid fuerit minus plene dictum in supradictis, in sex capitulis postpositis satis et sufficienter cum triplici perfectione plenaria, perfecta et ultimata dictabitur iuxta illud, quod dicitur, ubi dicit: Omnis sensibilis proprietatis notitia plenam, perfectam et ultimam perfectionem intelligentiae tribuit veritatis. (*Anonymus IV*, ed. p. 40). Both Grosseteste and the anonymous author focus on the concept of circular motions. Grosseteste develops the principle, *In motu circulari primum est* in his Physics commentary: Manifestum est quod omnis pars non spherica circulariter mota habet inicium in motu sibi proprio. Et dico eciam quod tota sphera circulariter mota movetur per se et non solum per accidens eo quod partes eius per se moventur, et quod moventur eciam localiter sicut dicit Aristoteles. Sed localiter moveri, sicut dicit Averroys, est duobus modis: movetur enim aliquid localiter quia transit de uno loco ad alium, et hoc est mutare locum secundum subiectum; vel quia aliter est nunc et prius et posterius in eodem loco, et hoc est mutare locum non per subiectum sed formaliter; et sic movetur celum localiter et per se (*Comm. in Phys.*, ed. p. 152). He returns to the concept of *circulariter* in many other contexts, within the entire scope of his works, as well. As for the anonymous author, the mention of *circularis*, *circularitas*, *circulatio* distinguishes him from other contemporaries: Et postmodum reiteratur ut a principio *per modum circularis processus*

their relationship, and the methodology with which one discussed their material have all vanished.

There seemed, however, to be some confusion about discipines even in the thirteenth century. Robert Grosseteste takes great pains to set this straight. He discusses the nature of each of the disciplines, their ways of interacting with one another, and the methods for dealing with them. It is interesting that this aspect of his work has, by and large, been ignored. In addition, Grosseteste was obviously interested in tools—in instruments—for analysis, demonstration, and clarification. His interest in motion is not a thermodynamic one, and he is not especially interested in practical application. He is interested in motion as an abstraction, as well as in ways in which one could observe motion within all of the disciplines. Motion, thus, at the same time as it delegated each discipline's authority and individuality, united the disciplines in a common task of making the nature of motion comprehensible. This example, perhaps more than any other, shows how intellectual objectives in the thirteenth century generally, and those undertaken by Robert Grosseteste, in particular, differ.

We can learn something from these thirteenth-century intellectuals. The concept of cohesion and reciprocity among the *artes* provided internal vigor and order for the structure of the early university. All disciplinary areas were necessary; each was important for understanding all of the basic issues. Their multiplicity and diversity insured against the imbalance of one disciplinary point of view. For example, if motion was discussed only in terms of motions within the study of physics, the entire discussion would remain abstract. Motion in terms of the dynamic of proportional relationships, in terms of geometric figures, as discussed by Grosseteste, and in terms of the motion of individual tones moving from one to the next within musical syntax, all provided a necessary perspective. Ethical discourse, of course, made the concept of motion within a regime, or course of a life, intensely practical. As a matter of fact, one could apply these concepts to one's own life.

Both the relationship of the arts among themselves, and the possibility of application to life experience made the early intellectual milieu of the universities of Paris and Oxford energetic and influential, despite, no doubt,

---

(*Anonymus IV*, ed. p. 27); Iste ordo crescit per tria inter unum et duo primo; deinde crescit per tria ante, deinde per tria post duo coniuncta etc. *circulari motu*...(p. 28); Et sic procedit iuxta numerum, *quousque habueris circularem processum*...Tertius ordo sexti imperfecti procedit per quatuor, tria, duo coniuncta imperfecta cum una longa pausatione duorum temporum, et sic procede de istis novem, sicut fecisti de sex supradictis suo modo, *donec habueris circularem sufficientiam* (p. 35); Et aliter possunt praedicta intelligi, si longa pausatio fieret pro duabus brevibus, ubi melius competat, et sic erit una diminutio *diversitatis a sua circularitate* (p. 3l);...sic etiam in tertio ordine fiat ita, quod decima sit longa, sive fuerit pausatio sive punctus; *et ita fiat processus, donec circulatio perficiatur* (p. 36, all italics added).

all of the problems which medieval and modern universities have in common: financial pressures, polarized political cliques, vain professors, truculent students, issues of academic freedom, and the hostility of the non-academic environment, to name a few. They certainly had it all, yet a marvelous vitality reaches us even today.

ABBREVIATIONS OF WORKS CITED

AH	*Analecta hymnica medii aevi,* ed. G. M. Dreves, Clemens Blume, H. M. Bannister, 55 vols (Leipzig, 1886-1922)
BGPM	*Beitraege zur Geschichte der Philosophie des Mittelalters,* ed. Clemens Baeumker (Muenster i. W., 1891 ff)
CCSL	*Corpus Christianorum Series Latina* (Turnhout, 1953ff)
CHLMP	*The Cambridge History of Later Medieval Philosophy,* ed. Norman Kretzmann, Anthony Kenny, Jan Pinborg, with Eleonore Stump (Cambridge, 1982)
CMM	*Corpus Mensurabilis Musicae* (American Institute of Musicology, Rome)
CPDMAe	*Corpus Philosophorum Danicorum Medii Aevi* (Copenhagen, 1969ff)
CS	Charles Edmond Henri de Coussemaker, *Scriptorum de Musica medii aevi nova seriem a Gerbertina alteram,* 4 vols (Paris, 1864-76, repr. Hildesheim, 1963)
CSEL	*Corpus Scriptorum Ecclesiasticorum Latinorum* (Vienna and other cities, 1866ff)
CSM	*Corpus Scriptorum de Musica* (American Institute of Musicology, Rome, 1950/1951ff)
GS	Martin Gerbert, *Scriptores ecclesiastici de musica sacra potissimum,* 3 vols (Sankt-Blasien, 1784, repr. Hildesheim 1963)
PL	*Patrologiae cursus completus, Series latina,* ed. Jacques Paul Migne, 221 vols (Paris, 1844-55)
PM	*Paléographie musicale* XII: Codes F. 160 de la Bibliothèque de la Cathedrale de Worcester (XIIIe siecle): Antiphonaire Monastique (Solemes, 1922-25)

BIBLIOGRAPHY

Editions and Translations:

Alain de Lille, *Expositio super symbolum apostolicum et Nicenum*, ed. Marie-Thérèse d'Alverny, *Textes inédits avec un introduction sur sa vie et ses oeuvres*, ed. Marie-Thérèse d'Alverny (Paris, 1965), pp. 83f

Albertus, *Quaestiones de modi significandi*, ed. L. Kelly (*Amsterdam Studies in the Theory and History of Linguistics*, Series III: *Studies in the History of Linguistics* 15, Amsterdam, 1977)

Ambrose, *Hexaemeron*, *CSEL*, XXXII.1, ed. C. Schenkl (Vienna, 1897)

Analecta Hymnica medii aevi, ed. Guido Maria Dreves in collaboration with Clemens Blume, H. M. Bannister (55 vols, Leipzig, 1886-1922) 21

Anonymous IV, ed. Fritz Reckow (*Beihefte zum Archiv fuer Musikwissenschaft* V, 2 vols, Wiesbaden, 1967) II

Aristides Quintilianus, ed. Marcus Meibom (*Antiquae musicae auctores septem. Graece et Latine*, Amsterdam, 1652), trans. Thomas J. Mathiesen, *Aristides Quintilianus on Music* (New Haven, Connecticut, 1983)

Aristotle, *Concerning the Heavens*, trans. Jonathan Barnes (*Bollingen Series* LXXI, 2 vols, Princeton, 1984), I, pp. 447-511

Metaphysics, trans. Jonathan Barnes, II, pp. 1552-1728

Meteorologica, trans. Jonathan Barnes, I, pp. 555-625

Nichomachean Ethics, trans. Jonathan Barnes, II, pp. 1729-1867

Physics, trans. Jonathan Barnes, I, pp. 315-446

Aristoteles latinus, *Ethica Nicomachea*, trans. Robert Grosseteste, ed. Renatus Antonius Gauthier (vol XXVI, 1-3, Leiden, 1972)

Commentaries on the above works listed according to commentator

Augustine, *De civitate Dei*, *PL* XLI, *CCSL* XLVIII, ed. Bernard Dombart and Alphonso Kalb (Turnhout, 1955), *The City of God*, trans. Gerald G. Walsh, SJ, Demetrius B. Zema, SJ, Grace Monahan, OSU, and Daniel J. Honan (abridged English translation, NY, 1950)

De doctrina christiana, IV *PL* XXXIV, *CSEL* LXXX, ed. Guilelmus M. Green (Vienna, 1963), *CCSL* XXXII, ed. Joseph Martin (Turnhout, 1962)

De Genesi ad litteram, *PL* XXXIV, *CSEL* XXVIII.1, ed. Josephus Zycha (Vienna/Prague, Leipzig, 1894)

De immortalitate animae, *PL* XXXII,

De libero arbitrio, *PL* XXXII *CSEL* LXXIV, ed. Guilelmus M. Green (Vienna, 1956)

De musica, *PL* XXXII, *Aurelii Augustini: De Musica*, ed. Giovanni Marzi (*Collana di Classici della Filosofia Cristiana* 1, Florence, 1969)

Enarrationes in psalmos, *PL* XXXVI-XXXVII, *CCSL* XXXVIII-XL, ed. Eligius Dekkers and Johannes Fraipont (Turnhout, 1956)

Enchiridion, *PL* XL, ed. Franciscus Moriunes (*Biblioteca de Autores Christianos*, Madrid, 1961), *CCSL* XLVI, ed. M. R. J. van den Hout (Turnhout, 1969)

In Iohannis evangelium tractatus, *PL* XXXV, *CCSL* XXXVI, ed. D. Radbodus Willems, OSB (Turnhout, 1954)

Retractiones, *PL XXXII*, *CSEL* XXXVI, ed. Pius Knoell (Vienna/Leipzig, 1902)

Sermones, *PL* XXXVIII

De Trinitate, *PL* XLII, *CCSL* L-LA, ed. W. J. Mountain (Turnhout, 1968)

Avicenna, *De celo et mundo. Opera omnia* (Venice, 1508)

Basil, *Hexaemeron. Eustathius: ancienne version latine des neuf homelies sur l'Hexaemeron de Basile de Césarée*, ed. Emmanuel Amand de Mendieta et Stig Y. Rudberg (*Texte und Untersuchungen zur Geschichte der altchristlichen Literatur* 66, Bd. 5, Berlin, 1958)

Bede, *Hexaemeron*, *PL* XCI

In pentateuchum commentarii. Expositio in primum librum Mosis, *PL* XCI, *CCSL* CXVIIIA, ed. Charles W. Jones (Turnhout, 1967)

Opera de temporibus, ed. Charles W. Jones (*Medieval Academy of America Publications* 41, Cambridge, Massachusetts, 1943)

Boethius, *De consolatione philosophiae*, ed. and trans. H. F. Stewart, with E. K. Rand, and S. J. Tester (*Loeb Classical Library* 74, repr. Cambridge, Massachusetts, 1978)

De musica, *PL* LXIII, *A. M. T. S. Boetii. De institutione musica libri quinque*...ed. Gottfried Friedlein (Leipzig 1867, repr. Frankfurt, 1966)

De topicis differentiis libri quattuor, *PL* LXIV, trans. with notes and essays on the text, Eleonore Stump (Ithaca, New York, 1978)

Boethius of Dacia, *Quaestiones super Priscianum maiorem*, ed. J. Pinborg and H. Roos (*Corpus philosophorum danicorum medii aevi* 4, Copenhagen, 1969)

Quaestiones super librum Topicorum, ed. N. J. Green-Pederson (*Boethii Daci Opera*, *CPDMAe* 6,1, Copenhagen, 1979)

Boncampagno of Signa, *Rhetorica novissima*, ed. A. Gaudenzi (Bologna, 1892, repr. Torino, 1962)

Cassiodorus, *Expositio psalmorum*, *CCSL* XCVII, XCVIII, ed. M. Adriaen (Turnhout, 1958)

Gratian of Bologna, *Concordia discordantium canonum*, ed. A. Friedberg (*Corpus juris canonici* 1, Tauchnitz, 1879)

Gregory of Nyssa, *De opificio hominis* (trans. Dionysius Exiguus, ed. G. H. Forbesius, Burntisland, 1855-1861)

Grosseteste, *De artibus liberalibus*, ed. Ludwig Baur, *Die philosophischen Werke Robert Grosseteste, Bischofs von Lincoln* (*Beitraege z. Geschichte der Philosophie des Mittelalters* 9, Muenster i. W., 1912) pp. 1-7

De cessatione legalium, ed. Richard C. Dales and Edward B. King (*Auctores Britannici medii aevi*, VII, London, 1986)

De decem mandatis, ed. Richard C. Dales and Edward B. King (*Auctores Britannici medii aevi* X, Oxford, 1987)

De finitate motus et temporis, ed. L. Baur, pp. 101-106, ed. Richard C. Dales, *Traditio* 19 (1963), pp. 245-266

De generatione sonorum, ed. L. Baur, 7-10

De lineis angulis et figuris, ed. L. Baur, pp. 59ff.

De motu corporali et luce, ed. L. Baur, pp. 90ff.

De motu supercaelestium, ed. L. Baur, pp. 92-100

Hexaemeron, ed. Richard C. Dales, Servus Gieben, OFM, Cap. (*Auctores Britannici medii aevi*, VI, 1982)

Commentarius in VIII Libros Physicorum Aristotelis, ed. Richard C. Dales (*Studies and Texts in Medieval Thought*, Boulder, Colorado, 1963)

Commentarius in Posteriorum Analyticorum Libros, ed. Pietro Rossi (Florence, 1981)

Guido of Arezzo, *Micrologus*, ed. J. Smits van Waesberghe (*Corpus Scriptorum de Musica*, 4, Rome, 1956)

The History of the University of Oxford, ed. J. I. Catto (Oxford, 1984)

Hugh of St. Victor, *Didascalicon de studio legendi*, ed. Charles Henry Buttimer (*Studies in Medieval and Renaissance Latin* 10, Washington, D.C., 1939)

Didascalicon, Engl. trans. Jerome Taylor (Columbia, 1961)

Expositio in Hierarchiam coelestem, *PL* CLXXV

Isidore of Seville, *Etymologiarum sive Originum libri XX*, *PL* LXXXII, ed. W. M. Lindsay (Oxford, 1911, repr. 1966)

Liber numerorum, *PL* LXXXIII

Quaestiones in vetus testamentum, *PL* LXXXIII

Jerome, *Contra Ioannem Hierosolymitanum*, *PL* XXIII

Epistulae, *CSEL* LIV-LVI, ed. Isidorus Hillberg (Vienna, Leipzig, 1910-1918), *Saint Jérôme Lettres*, ed. and trans. Jérôme Labourt (*Collection des Universités de France*, 7 vols, Paris, 1949-1963)

Hebraicae quaestiones in Genesim, *PL* XXIII, *CCSL* LXXII, ed. P. Antin (Turnhout, 1959)

Johannes of Dacia, *Summa grammatica*, ed. A. Otto (*CPDMAe* 1, Copenhagen, 1955)

Johannes Damascenus, *De fide orthodoxa. St. John Damascene De Fide Orthodoxa. Versions of Burgundio and Cerbanus*, ed. Eligius M. Buytaert (*Franciscan Institute Publications*, Text Series, 8, St. Bonaventure, New York, 1955)

Johannes Duns Scotus, *Quaestiones in Physica*, ed. Carlo Balić (*Opera omnia*, Vatican City, 1950)

Johannes of Garlandia, *De mensurabili musica*, ed. Erich Reimer (*Beihefte zum Archiv fuer Musikwissenschaft* X, 2 vols, Wiesbaden, 1972) I

Johannes Scotus Eriugena, *De divisione naturae*, *PL* CXXII

Macrobius, *Commentarii in somnium Scipionis*, ed. J. Willis (Leipzig, 1970)

Martianus Capella, *De nuptiis philologiae et Mercurii*, ed. Adolfus Dick (*Bibliotheca scriptorum graecorum et romanorum teubneriana*, Leipzig, 1925), *The Marriage of Philology and Mercury*, trans. William Harris Stahl and Richard Johnson with E. L. Burge (New York, 1977)

Martin of Dacia, *Modi significandi*, ed. H. Roos (*CPDMAe* 2, Copenhagen, 1961)

Matthew Paris, *Chronica maiora*, ed. H. R. Luard (*Rolls Series*, London, 1872-1884)

Michael of Marbasio, *Summa modorum significandi*, ed. J. Pinborg ("Some Problems of Semantic Representations in Medieval Logic," *History of Linguistic Thought and Contemporary Linguistics*, ed. H. Parrett, Berlin, 1976)

Peter the Lombard, *Commentaria in Psalmos*, PL CXCI

Petrarch, *Secretum. Secretum: Petrarch's Secret or the Soul's Conflict with Passion. Three Dialogues between Himself and S. Augustine*, trans. W. H. Draper (London, 1911 repr. 1975)

Philippe the Chancellor, *Summa de bona*, ed. Nicholas Wicki (*Corpus philosophorum medii aevi. Opera philosophiae mediae aetatis selecta*, 2 vols, Bern, Switzerland, 1985)

Plato, *Phaedo interprete Henrico Aristippo*, ed. Laurentius Minio-Paluello (*Plato latinus* 2, London, 1950)

Phaedo, Engl. trans. R. Hackforth (Cambridge, 1955)

Timaeus a Calcidio translatus commentarioque instructus, ed. J. H. Waszink (*Plato latinus* 4, London/Leiden, 1975)

Poetae christiani minores, *CSEL* XVI, ed. M. Petschenig, R. Ellis, G. Brandes, C. Schenkl (Vienna, Prague, Leipzig, 1888)

Pseudo-Dionysius, *De caelesti hierarchia interprete Hugone de S. Victore*, *PL* CLXXV

De divinis nominibus, ed. P. Chevallier, *Dionysiana: le text latin des oeuvres du ps. Ar<a>eopagite*, I (Paris, 1927)

Pseudo-Rhabanus, *De corpore*, *PL* CXX

Radulphus Brito, *Quaestiones super Priscianum minorem*, ed. Heinz W. Enders and J. Pinborg (*Grammatica speculativa* 3, Stuttgart, 1980)

Remigius of Auxerre, *Commentum in Martianum Capellam, Libri I-II*, ed. Cora E. Lutz (Leiden, 1962)

Scriptorum de musica medii aevi, nova series, I, ed. Edmond de Coussemaker (repr. Hildesheim, 1963)

Siger of Courtrai, *Summa modorum significandi*, new ed. on the basis of G. Wallerand's *editio prima*, J. Pinborg (*Amsterdam Studies in the Theory and History of Linguistics*, Series III, *Studies in the History of Linguistics* 14, Amsterdam, 1977)

Thomas Aquinas, *In duodecim libros Metaphysicorum Aristotelis expositio*, ed. M.-R. Cathala, OP (Rome, 1964)

Thomas of Erfurt, *Grammatica speculativa*, ed. and trans. G. L. Bursill-Hall (*The Classics of Linguistics* 1, London, 1972)

Valeria Faltonia Proba, *Centones Virgiliani PL* XIX

Virgil, *Aeneid*, ed. H. R. Fairclough (*Loeb Classical Library*, Cambridge, Massachusetts,)

Walter Burley, *Super octo libros Physicorum* (Venice, 1491, 1501)

Manuscripts mentioned:

Eton, College Library Ms 8

Florence, Biblioteca Mediceo-Laurenziana Ms Pluteus 29, 1

London, British Library Additional Ms 4909

London, British Library Ms Cotton Tiberius B. IX

London, British Library Ms Royal 12 C.VI

Milano, Biblioteca Ambrosiana Ms D 5 inf.

Oxford, Balliol College Library Ms 57
Oxford, Bodleian Library Ms lat. th. c. 17
Paris, Bibliothèque nationale Ms nouv. acq. f. lat. 1235
Paris, Bibliothèque nationale Ms nouv. acq. f. lat. 1236
Wolfenbuettel, Herzog-August-Bibliothek Ms 628
Wolfenbuettel, Herzog-August-Bibliothek Ms 1099
Worcester, Chapter Library, codex F. 160

Secondary Literature:

Allen, Michael J. B., *The Platonism of Marsilio Ficino: A Study of His Phaedrus Commentary, its Sources and Genesis* (Berkeley, 1984)

d'Alverny, Marie-Thérèse, *Alain de Lille, Textes inédits avec une introduction sur sa vie et ses oeuvres* (Paris, 1965)

Anderson, Gordon A., *Notre-Dame and Related Conductus: Opera Omnia. The One-Part Conductus Transmitted in Fascicule X of the Florence Manuscript* (Henryville, Pennsylvania, 1981)

Baldwin, John W., *Masters, Princes, and Merchants: The Social Views of Peter the Chanter and His Circle,* 2 vols (Princeton, NJ, 1970)

The Government of Philip Augustus. Foundations of French Royal Power in the Middle Ages (Berkeley, 1986)

Baltzer, Rebecca A., "Thirteenth-Century Illuminated Miniatures and the Date of the Florence Manuscript," *Journal of the American Musicological Society* 25 (1972), pp. 1-18

Baur, Ludwig, *Die Philosophie des Robert Grosseteste* (Munster i. W., 1917)

Besseler, Heinrich, "Franco von Koeln," *Musik in die Geschichte und Gegenwart* 4 (Kassel, 1955), 691

Boyle, L. E., "Robert Grosseteste and the Pastoral Care," *Medieval and Renaissance Studies* 8 (1979), pp. 3-51

Burnett, Charles, "The use of Geometrical Terms in Medieval Music: elmuahim and elmuarifa and the Anonymous IV," *Sudhoffs Archiv* 70 (1986), pp. 198-205

"Sound and its Perception in the Middle Ages," *The Second Sense, Studies in Hearing and Musical Judgement from Antiquity to the Seventeenth Century,* ed. Charles Burnett, Michael Fend, and Penelope Gouk (*Warburg Institute Surveys and Texts* XXII, London, 1991), pp. 43-69

Callus, D. A."Introduction of Aristotelian Learning to Oxford," *Proceedings of the British Academy* 29 (1943), pp. 229-281

"The Oxford Career of Robert Grosseteste," *Oxoniensia* 10 (1945), pp. 42-72

"Robert Grosseteste as Scholar," *Robert Grosseteste, Scholar and Bishop,* ed. D. A. Callus, (Oxford, 1955), pp. 1-11

Robert Grosseteste, Scholar and Bishop (Oxford, 1955)

"The subject-matter of Metaphysics according to some Thirteenth-Century Oxford Masters," *Die Metaphysik im Mittelalter. Ihr Ursprung und ihre Bedeutung,* ed. Paul Wilpert (*Miscellanea Mediaevalia* 2, Berlin, 1963)

Carpenter, Nan Cooke, *Music in the Medieval and Renaissance Universities* (Norman, Oklahoma, 1958)

Chevallier, P., *Dionysiana: le text latin des oeuvres du ps. Ar<a>eopagite* (Paris, 1972)

Dales, Richard C., "Robert Grosseteste's Scientific Works," *Isis,* 52 (1961), pp. 381-402

"The Influence of Grosseteste's 'Hexaemeron' on the 'Sentences' Commentaries of Richard Fishacre, OP, and Richard Rufus of Cornwall, OFM," *Viator* 2 (1971), pp. 271-300

"Marius 'On the Elements' and the Twelfth-Century Science of Matter," *Viator* 3 (1972), pp. 191-218

"Time and Eternity in the 13th Century," *Journal of the History of Ideas* 49 (1988), pp. 27-45

Medieval Discussions of the Eternity of the World (Leiden, 1990)

Dales, Richard C. and Servus Gieben, OFM. Cap., "The Prooemium to Robert Grosseteste's *Hexaemeron,*" *Speculum* 43 (1968), pp. 456-460

Dalglish, William, "The Origin of the Hocket," *Journal of the American Musicological Society* 31 (1978), pp. 3-20

van Deusen, Nancy, *Music at Nevers Cathedral: Principal Sources of Medieval Chant*, 2 vols (Binningen, Switzerland, 1980)

"The Image of the Harp and Trecento Reception of Plato's *Phaedo*," *Florilegium* 7 (1985), pp. 155-178

"Narration, a Concept of History, and Medieval Liturgical Drama: An Epiphany Play Reconsidered," *The Harp and the Soul: Essays in Medieval Music* (New York, 1989), pp. 75-108

"Rhythmic Structure and Speculative Grammar: The Musical 'Modistae,'" *The Harp and the Soul*, pp. 256-305

"The Paradigm of *Figura* and its Importance for an Understanding of Rhythm," *Paradigms in Medieval Thought: Applications in Medieval Disciplines, A Symposium*, ed. Nancy van Deusen and Alvin E. Ford (New York, 1990), pp. 65-80

"Procession without Progress: the Mastery of Static Style in the Medieval Latin Sequence," *The Medieval West Meets the Rest of the World: Medieval Concepts and Their Resonance with Other World Cultures* (in press)

Dod, Bernard G., "Aristoteles latinus," *The Cambridge History of Later Medieval Philosophy*, ed. Norman Kretzmann, Anthony Kenny, Jan Pinborg, Eleonore Stump (Cambridge, 1982), pp.44-79

Dronke, Peter, "The Lyrical Compositions of Philip the Chancellor," *Studi medievali*, 3rd ser., 28 (1987), pp. 563-592

Edwards, Kathleen, *The English Secular Cathedrals in the Middle Ages* (2nd ed., Manchester, 1967)

"Franco of Cologne," *Grove's Dictionary of Music and Musicians* (5th ed. Eric Blom, London, 1954), *The New Groves Dictionary of Music and Musicians* (6th ed. Stanley Sadie, London, 1980)

Funkenstein, Amos, *Theology and the Scientific Imagination* (Princeton, 1986)

Effler, Roy R., OFM, *John Duns Scotus and the Principle "Omne quod movetur ab alio movetur"* (St. Bonaventure, New York, 1962)

Evans, J. D. G., *Aristotle's Concept of Dialectic* (Cambridge, 1977)

Frobenius, Wolf, "Cantus Firmus," *Handwoerterbuch der musikalischen Terminologie* (Wiesbaden, 1977ff)

"Perfectio," *Handwoerterbuch der musikalischen Terminologie* (Wiesbaden, 1977ff)

"Proprietas," *Handwoerterbuch der musikalischen Terminologie* (Wiesbaden, 1977ff)

Glorieux, Palémon, *La Faculté des arts et ses maîtres au xiiie siècle* (Paris, 1971)

Goering, Joseph, "When and Where did Grosseteste Study Theology," *Robert Grosseteste: New Perspectives on his Life and Thought*, ed. James McEvoy (*Instrumenta Patristica*, Turnhout, 1993)

Gombrich, E. H., *Symbolic Images: Studies in the Art of the Renaissance* 2 (London, 1972)

Grant, Edward, *Much Ado about Nothing: Theories of Space and Vacuum from the Middle Ages to the Scientific Revolution* (Cambridge, 1981)

Gross-Diaz, Theresa, *The Psalm Commentaries of Gilbert of Poitiers: From 'Lectio divina' to the Lecture Room* (Ph.D. Dissertation, Northwestern University, 1992)

Handschin, Jacques, "Was brachte die Notre Dame-Schule Neues?" *Zeitschrift fuer Musikwissenschaft* 6 (1924), pp. 548-558

"Zur Geschichte von Notre Dame," *Acta Musicologica* 4 (1932), pp. 5-17, 49-55

"Zur Leonin-Perotin-Frage," *Zeitschrift fuer Musikwissenschaft* 14 (1931-2), pp. 319ff.

"Réflexions sur la terminologie," *Revue Belge de Musicologie* 6 (1952), pp. 7-12

Hiler, A., "Petrarch's Greek Codex of Plato," *Classical Philology* 59 (1964), pp. 270ff.

Huglo, Michel, "The Study of Ancient Sources of Music Theory in the Medieval Universities," *Music Theory and its Sources. Antiquity and the Middle Ages*, ed. André Barbera (Notre Dame, 1990), pp. 150-172.

Hunt, Richard W., "Manuscripts containing the indexing symbols of Robert Grosseteste," *Bodleian Library Record* 4 (1953), pp. 241-255

"The Library of Robert Grosseteste," *Robert Grosseteste, Scholar and Bishop*, pp. 121-145

James, M. R., "Robert Grosseteste on the Psalms," *Journal of Theological Studies* 23 (1921), pp. 181-185

Karp, Theodore C., "Music," *The Seven Liberal Arts in the Middle Ages*, ed. David L. Wagner (Bloomington, Indiana, 1986), pp. 169-195

Klibansky, Raymond, *The Continuity of the Platonic Tradition during the Middle Ages: Outlines of a Corpus platonicum medii aevi* (London, 1939, with new prefaces and supplement, repr. Munich, 1981)

Knapp, Janet, "Musical Declamation and Poetic Rhythm in an Early Layer of Notre Dame Conductus," *Journal of the American Musicological Society* 32 (1979) pp. 383ff.

Korolec, J. B., "Free will and free choice," *CHLMP*, pp. 629-641

Kuksewicz, Z. "The potential and the agent intellect," *CHLMP*, pp. 595-601

Kuttner, Stephan, "Harmony from Dissonance. An Interpretation of Medieval Canon Law," *The History of Ideas and Doctrines of Canon Law in the Middle Ages* (*Variorum Reprints*, London, 1980), pp. 1-16

Ladner, Gerhart B., "St. Gregory of Nyssa and St. Augustine on the Symbolism of the Cross," *Late Classical and Medieval Studies in Honor of Albert Mathias Friend, Jr.* ed. Kurt Weitzmann (Princeton, 1955), pp. 88-95.

"Medieval and Modern Understanding of Symbolism: A Comparison, " *Speculum* 54 (1979), pp. 223-256

Leff, Michael C., "Boethius' *De differentiis topicis, Book IV*," *Medieval Eloquence*, ed. James J. Murphy (Berkeley, 1978), pp. 3-24

Marrone, Steven P., *William of Auvergne and Robert Grosseteste. New Ideas of Truth in the Early Thirteenth Century* (Princeton, 1983)

McClure, Judith, "Bede's Notes on Genesis and the Training of the Anglo-Saxon Clergy," *The Bible in the Medieval World. Essays in Memory of Beryl Smalley*, ed. Katherine Walsh and Diana Wood (Oxford, 1985), pp. 17-30

McEvoy, James, "The Sun as 'res' and 'signum': Grosseteste's commentary on 'Ecclesiasticus' ch. 43, vv. 1-5," *Recherches de théologie ancienne et médiévale* 41 (1974), pp. 38-91

"The Chronology of Robert Grosseteste's Writings on Nature and Natural Philosophy," *Speculum* 58 (1982), pp. 614-655

The Philosophy of Robert Grosseteste (Oxford, 1983)

ed. *Robert Grosseteste: New Perspectives on his Life and Thought* (*Instrumenta Patristica*, Turnhout, 1993)

Meyer, Wilhelm, *Der Ursprung des Motetts* (*Nachrichten von der Wissenschaften zu Göttingen, philosophisch-historische Klasse, II/ll3); repr. Gesammelte Abhandlungen zur mittellateinischen Rhythmik* ii (Berlin, 1905), pp. 303-341

Morrison, Karl F., "Incentives for Studying the Liberal Arts," *The Seven Liberal Arts in the Middle Ages*, ed. David L. Wagner (Bloomington, Indiana, 1986), pp. 32-57

Muckle, J. T., CSB, "Robert Grosseteste's Use of Greek Sources in his *Hexameron*," *Medievalia et Humanistica* 3 (1945), pp. 33-48

"Did Robert Grosseteste Attribute the *Hexaemeron* of St. Venerable Bede to St. Jerome?" *Mediaeval Studies* 13 (1951), pp. 242-244

Mueller, Hermann, "Zur Musikauffassung des Mittelalters," *Festschrift Hermann Kretzschmar zum 70. Geburtstage* (Leipzig, 1918), pp. 96-100

Murdoch, John Emery and Edith Dudley Sylla, eds., *The Cultural Context of Medieval Learning* (Dordrecht/Boston, 1973)

Murdoch, John Emery, "Infinity and Continuity," *CHLMP*, p. 564-592

Payne, Thomas B., *Poetry, Politics, and Polyphony: Philip the Chancellor's Contribution to the Music of the Notre Dame School*, 2 vols (Ph.D. dissertation, University of Chicago, 1991)

Pegge, Samuel, *The Life of Robert Grosseteste, the celebrated Bishop of Lincoln, with an account of the Bishop's Works and an Appendix* (London, 1793)

Phelan, Gerald B., "An Unedited Text of Robert Grosseteste on the Subject-Matter of Theology," *Revue néoscolastique de philosophie* 36 (1934), pp. 176-179

Pinborg, J., *Logik und Semantik im Mittelalter: Ein Ueberblick* (Stuttgart, 1972)

"Some Problems of Semantic Representations in Medieval Logic," *History of Linguistic Thought and Contemporary Linguistics*, ed. H. Parrett (Berlin, 1976)

"Speculative Grammar," *CHLMP*, pp. 254-270

Powicke, Maurice, *The Thirteenth Century*, 1216-1307 (2nd edition, Oxford, 1962)

Reaney, Gilbert, "The Question of Authorship in the Medieval Treatises on Music," *Musica Disciplina* 18 (1964), pp. 7-17

Reckow, Fritz,"Conductus," *Handwoerterbuch der musikalischen Terminologie* (Wiesbaden, 1977ff.)

Der Musiktraktat des Anonymus 4 (*Beihefte zum Archiv fuer Musikwissenschaft* V, Wiesbaden, 1967) I

Rorem, Paul, *Biblical and Liturgical Symbols within the Pseudo-Dionysian Synthesis* (*Pontifical Institute of Medieval Studies, Studies and Texts*, 71, Toronto, 1984)

Rouse, Mary A. and Richard H., "The Development of Research Tools in the Thirteenth Century," *Authentic Witnesses: Approaches to Medieval Texts in Manuscripts* (*Publications in Medieval Studies,* 17, Notre Dame, Indiana, 1991) pp. 221-255

Russell, Josiah C., "The Preferments and 'Adiutores' of Robert Grosseteste," *Harvard Theological Review*, 26 (1933), pp. 121-172

"Richard of Bardney's Account of Robert Grosseteste's Early and Middle Life," *Medievalia et Humanistica* 2 (1944), pp. 45-54

"Phases of Grosseteste's Intellectual Life," *Harvard Theological Review*, 48 (1950), pp. 93-116

Sanders, Ernest, "The Question of Perotin's Oeuvre and Dates," *Festschrift fuer Walter Wiora zum 30. Dezember 1966*, ed. Ludwig Finscher and Christoph-Hellmut Mahling (Kassel, 1967), pp. 241-249

"Conductus and Modal Rhythm," *Journal of the American Musicological Society* 38 (1985), pp.439-469

Sharp, Dorothea E., *Franciscan Philosophy at Oxford in the Thirteenth Century* (Oxford, 1930)

Smalley, Beryl, *The Study of the Bible in the Middle Ages* (Oxford, 1941, repr. 1952)

"The Biblical Scholar," *Robert Grosseteste, Scholar and Bishop*, ed. D. A. Callus (Oxford, 1955), pp. 70-97

Southern, Richard W., *Robert Grosseteste: The Growth of an English Mind in Medieval Europe* (Oxford, 1986)

"Introduction: Richard Dales and the Editing of Robert Grosseteste," *Aspectus et Affectus. Essays and Editions in Grosseteste and Medieval Intellectual Life in Honor of Richard C. Dales*, ed. Gunar Freibergs (New York, 1991), pp. 3-14

Stump, Eleanore, "Topics: their development and absorption into consequences," *CHLMP*, pp. 273-299

Thomson, S. H., "Grosseteste's Topical Concordance of the Bible and the Fathers," *Speculum* 9 (1934), pp. 139-144

The Writings of Robert Grosseteste, Bishop of Lincoln (Cambridge, 1940)

"Grosseteste's Concordantial Signs," *Medievalia et Humanistica* 9 (1955), pp. 39-53

Tierney, Brian, "Natural Law and Canon Law in Ockham's Dialogus," *Aspects of Late Medieval Government and Society: Essays Presented to J. R. Lander,* ed. J. G. Rowe (Toronto, 1986), pp. 3-24

Tischler, Hans, "New Historical Aspects of the Parisian Organa," *Speculum* 25 (1950), pp. 21-35

"Perotinus Revisited," *Aspects of Medieval and Renaissance Music. A Birthday Offering to Gustave Reese*, ed. Jan LaRue (New York, 1966), pp. 803-817

Waite, William, *The Rhythm of Twelfth-Century Polyphony: Its Theory and Practice* (*Yale Studies in the History of Music* 2, New Haven, 1954)

Weisheipl, James A., *Nature and Motion in the Middle Ages,* ed. William E. Carroll (Studies *in Philosophy and the History of Philosophy* 11, Washington D. C., 1985)

Wright, Craig, *Music and Ceremony at Notre Dame of Paris, 500-1550* (Cambridge, 1989)

Zimmerman, Albert, *Verzeichnis ungedruckter Kommentare zur Metaphysik und Physik des Aristoteles aus der Zeit von etwa 1250-1350,* I (Leiden, 1971)

"Some Aspects of the Reception of Aristotle's *Physics* and *Metaphysics* in the Thirteenth Century," *Ad litteram, Authoritative Texts and their Medieval Readers,* ed. Mark D. Jordan and Kent Emery, Jr. (*Notre Dame Conferences in Medieval Studies* 3, Notre Dame, 1992), pp. 217-227

INDEX

accidentia 180
activa 108
actus, actum 23, 24, 30, 33, 100, 103, 106, 108, 110
ad modus contrarios 12
ad perfectionem 3, 11
ad tempus 26, 27
aequalia 68, 111, 140
aequipollentia 142
aequivoca 68, 111
aequivocationis 65
affectus 85, 106, 178
agalma 86
agencia 137
aggregare 64
aggregari 57
aggregato 131
alphabetum 79, 81
ambitio 47
ambitus 184
angulum 199
angulus, angulos 194
anima 40, 41, 110, 117, 154
appetitum ad operandum 109
appetitus 155
arismetrica 115
arithmon 74
armonia xi, 122, 123, 135, 196,
armonica ix, 31
armonice ix, 170, 174
ars 192
ars cantus 202
artes xii, 2, 16, 54, 86, 98, 209
artes liberales 3, 128, 161
artes mechanicae 128
artificiosa 31

binarius 196
bona 138, 148, 199
bonus 107, 148
brevis 4, 16, 47, 67, 98

calculus 79
cantico 82
cantilena 66
cantor 110
cantores 185, 200
cantus 110, 140, 148, 155, 156, 169, 172, 173, 200, 202
cantus coronatus 174
cantus mensurabilis 202
cantus planus, cantu plano 24, 32, 169, 186, 207
cantus prius factus 155, 156, 172
cantus prius factus 156, 160
cantus procreatus 140
capud 135, 151
capud ecclesie 135
carmen 14, 28
carmine 194
centimetrum 132
cento 133, 141
centones 132, 135, 139, 142, 146, 157
character 78, 89
charactere 76, 84
characterismos 79, 82
circularem 16, 209
circularis, circulari 169, 192, 194, 208
circularitas 208
circulatio 142, 194, 208, 209
cithara 82, 83
clausula 111, 185
cognicio, cognitio 64, 65, 86, 101, 132, 166, 168, 170, 181, 186
cognicio experimentalis 102
cognita 203
cognitionis 22
collatio 83, 84
collecta 128
collectio 128, 140
collocatus 56
composite 139
compositus 74
conaliter 169
concentus 83
concordantia 3, 4, 13, 15, 141, 200
concordantiae 174
concordatus 12
concordia ix, 31, 136, 167, 196
concorditer 165, 197
concurrente 137
concursus 137
conditor 148
conductus 38, 40, 43, 49, 125, 157, 173, 199, 200, 202, 204, 207
conglutinare 64
congregando 136
coniuncta 33, 169, 200
coniunctim 169
coniunctio 32, 90, 140, 142
conscientia 19
consilia 82
consonancia 67, 134, 139, 204

consonans 7, 197
constrictionis 192
contemplativa 108
contingere 169
continuo 137
contra 169, 171
contractio 10
contraria 139, 167, 174
contrarios 10, 12
contrarius 9, 169
conum 199
convenientia 72, 83
conversacio 30, 106, 110
conversatione 82
conversio 108, 169
copula 40, 60, 64, 106, 137, 169
copulare 169
copulatio 169
cor, cordis 83
corona 82
coronatus 135
corpus 104, 108, 115, 116, 122, 123, 129, 130, 131, 132, 133, 136, 138, 140, 142, 150, 152, 154, 184
creacio 152
creator 111
creatura 22, 83, 181
curriculum vitae 53

delectatio 82
demonstratio 194
descensus 131
descriptio 82
diapason 31, 141, 172, 174
diapente 31, 172, 174
diatessaron 31, 66, 172, 174
differentia 140, 141
diffinicio 137, 179
discantor 199
discantus 12, 171, 185, 186
disciplina 82, 83
discordia 197
disiuncta 200
dissonancia 167, 174, 198
distinctiones 89
ditonus 66, 174
diversis 65
diversitas 140, 141
diversitates 140, 141
divisibilis 11
divisio 196
doctrina 101, 102, 128, 181
dogma 101
ducere 3, 11, 66, 123
ductus 38, 40, 41, 42, 44, 45, 46, 60, 123, 125, 171, 190, 200, 204,
dulcisona 83
duos 196
duplus 11, 15
duracione 134, 165

ecclesia, ecclesiam, eccesie 56, 57, 128, 135, 162, 195
elmuahim 16
elmuarifa 16
eloquentia 181
energia 100, 101, 109
energô 100, 101
ens 119
epitome 79
equalitas 115
equaliter 183
equipollentia 101
equivocatio 14
evidenter 80
exempla xv, 16, 34
exemplar 123
exemplum 14, 41, 49, 54, 136
exercicio 102, 103
exposicio 178

Fabricator mundi 146, 150
ficcio 152
figura xvi, 14, 31, 32, 33, 35, 41, 47, 56, 60, 62, 73, 74, 76, 78, 79, 84, 89, 90, 93, 117, 140, 142, 168, 191, 192, 193, 194, 196, 197, 200
figura/modus 61
figura sillogistica 14
figurae 83, 90, 98, 130, 162, 168, 169, 191, 193, 205, 207
figurata 42, 137
figurate 179
figuratis 42
figuratur 35, 200
firmamentum 141, 163
firmus 172
forma 140, 154, 167, 183
fortuna 137
frangitur 199

generatio 197
genus 129
gracia, gracie 107, 108, 111
gradus 26
gubernando 102

harmonia x, 4, 10
homo 154
homo musicus 139
humana 163
hyle 42, 129

imago 93, 150

imitacio 150
imperfectus 66
impressiones 72
inclinacio 183, 192, 193
inclinativa 167
incomposita 104, 130, 134
individua 131
inferior 58, 163, 165, 169, 170
inferiori 172
inferius 154
infinita 103, 122
infinitas, infinitum 82, 131
infinitus 115
informatio 82
initium 105
inspiracio 152, 155
instrumenta 11, 83, 136
instrumentum, instrumentorum 103
integer 131, 136
intellectus 24, 33
intelligentia 181
intelligo 65, 111
intencio 24, 136
intentione 72
interior 128
interrogatio 114
iungendo 14

kentô 132

lateraliter 169, 199
latus 169
lex, legis 23, 25, 80, 166
lex naturalis 22, 26
liberum arbitrium 26
ligatura 32, 140
linea, lineae 169, 186, 193
lira 117, 120, 122, 123
literaliter 162
littera 27, 74, 78, 89, 137, 138, 141, 168, 193
litterae 80, 82
locus 66, 105, 163, 169, 177, 182, 183, 184
logica 14
logos 101
longa 4, 65, 98, 209
longae 67
lumen 22
lumine 80
lux 104, 108, 196

magnitudo 154
maneries 64
materia 62, 105, 141, 149, 152, 154, 167, 168, 183, 195
materialia 13, 14
materialiter 128, 195
media 10, 169
medietas 169
medio 165, 168
meditatio 80
medium 163, 166, 183
melodia 172
melos 14, 68, 141, 200
mensura 41, 61, 78, 154
mensuram 182
mensurata 15
minima 86
mischum 128
modi 64, 130
modi currentis 64
modi generationis 61
modificatrix 3
modistae 54
modos contrarios 12
modulatio ix, 31, 83
modulatione ix
modulo 23, 133
modus exponendi 58
modus victorie 60
modus xvi, 13, 14, 31, 35, 36, 54, 56, 57, 58, 60, 62, 64, 65, 66, 72, 73, 84, 106, 117, 119, 122, 124, 125, 141, 164, 166, 170, 193, 200, 204,
motiva 193
motivae 11
motus 9, 10, 11, 15, 139, 163, 182, 192
motus contrarius 7, 9, 15
multiplex 65, 68
multiplicacio 58, 73
multiplicentur 110
musica plana, plana musica 24, 202
musicus 110, 139

narracio, narracionem 133
natura 10, 57, 136, 137, 184, 192, 196
naturalis 10
naturaliter 22, 66, 111, 185
neuma 158, 159
nomen 54, 195
nomina 74
nota 47, 90, 171, 200
notantur 35
notator 200
numerus 32, 41, 62, 64, 65, 78, 90, 115, 140, 142, 154, 196

opera 47
operandi 153
operando 151
operari 13, 15, 66, 110
operatio 33, 100
operationes 3, 11

operatur 109, 129
opus 103, 146
ordinatio 90, 141
ordo 15, 40, 41, 60, 64, 72, 84, 106, 133, 134, 141, 155, 156, 157, 168, 171
ordo construccionis 133
organum 172, 173
origo 129
ornatum 81
ornatus 166
ortus 163
ostendendo 54

paradisus 162
pars 66, 172
parte 165, 167, 169, 170, 171
partes 61, 119, 142, 196, 205
participacione 73
passio 58, 72, 124
passiones 58, 63, 65, 74, 107, 124, 130, 142
passiva 167
pathos 58, 72, 124
pausatio 65, 66, 141, 171, 209
pausatione 90
peiran 101
peplaste 101
perfectio xvi, 32, 33, 35, 40, 60, 106, 111, 152, 155, 156, 157, 158, 195, 204
perfectus 13, 66, 153
persona 26
pes, pedes 32, 80, 90, 140, 142
pictura 47, 93
plana 47, 164
plana musica, musica plana 32, 170
plane 111, 170
planus 35, 166, 167, 169, 178, 204
plasma 101
plasmacio 152
plasso 101
pneuma 153, 155, 156, 158
pondus 41
portio 83
posterius 116, 178
potencia 103, 105, 108, 130, 139, 152, 167, 195
precepto 22
precognitio 194
preexistente 195
principia 137, 180
principio 64, 151, 167, 198
prius 178
prius factus 153, 154, 155, 158
processus, processum 142, 208, 209
procreatus 172
producta 103
productio 100
proportio 9, 13, 110, 174
proportiones 9, 10, 11, 13, 15
proprietas xvi, 32, 33, 35, 40, 106, 111, 152, 155, 157, 158, 195, 204
proprietates 178, 183
psalmus 79
psalterium 82
pulcra 58, 136, 148, 181, 196
pulcritudo 73, 107, 136
puncta 13, 14, 33, 169, 185
puncta materialia 14, 68
punctum 111, 141, 171, 193, 199
punctus 132, 141, 193, 209
pungo 132

quadrangulum 14, 199
quadrata 16
quaternitatem 82
quies 10, 136, 154
quies media 7, 9, 10, 18, 204

ratio, rationem 67, 101, 102, 135, 137
re composita 41
rectus 65
reducitur 199
reductio 141
regimen 11
regitive 41
regnatur 41
regnum 39, 42
regula 14, 15, 182
res 130, 132, 133, 140
res facta 134, 140, 142
res individua 131
res permanens 131
resonare 31
responsio 114
resurrectio 29
rithmus 74, 78, 89

sapiencia 115, 134, 136
schema 78, 82, 89, 93
scientia 82, 128, 136, 180
scriptura 24, 42
semiditonus 174
sensus 128, 135, 178, 181
sermo 54, 58, 59, 166, 180
sermo fixus 180
sesquialtera 10
sesquioctava 10
sesquitertia 10
signare 24
signatum 24
signatus 128, 182
significacio 196
signum 56, 84, 193
silva 129, 130

similtudo 150
simplex 32, 35, 66, 98, 115, 130, 136, 151, 166, 180, 181, 196
simpliciter 129, 131, 139, 178, 179, 180, 181, 183
simul 103, 105, 137, 151, 162
sine littera 27, 32, 138
singula 58
sonus 9, 122, 192, 197
sonus consonantis 7, 9, 197
sonus vocalis 7, 9
spacia 61
spacium 184
species 154, 178, 193
speculare 117
speculatio 4, 204
spiritualiter 58, 72
subtilians 164
subtilis 163
successio 103, 151
successiva 103, 151
superficies 183, 184
superior 58, 172
superiora 178
superius 13, 66, 85, 163, 165, 166, 169, 170, 171
superparticularitatis 68
symbolum 83, 84, 90, 93, 96
symphonia 65

tempora 27, 141, 163, 195
temporum 13
tempus 9, 26, 61, 62, 66, 131, 178, 182, 200, 208
tenor 140, 165, 166, 168, 170, 171, 172, 186
terminus 29, 43, 105
theologa 83
theologia 128, 136
theophania 86
theoria 109, 117
theos 84
tonus 66, 67
topos 42, 177, 180
tractatus 93
tractus 44
translatio vetus 1, 184
tremor 9, 11
triangulus 194
tripliciter 208
triplum 186

ultra mensuram 26, 36
ultra punctum 27
unisonus 13, 174
unus 58
usus, usum 101, 102, 103

varia 59
variacio 58, 73
variarae 83, 90, 98
Verbo 104, 106
verbo pleno 24, per verbum plenum 168
verbum 136, 150, 167
versus 132, 142, 157
via, viam 23, 37, 42, 48, 76, 140, 141, 171, 183, 194, 203
viator 194
virtus 10, 11, 108, 134, 164
virtutes 11, 107, 108
virtutes naturales 41
vis 57, 81, 107, 183
vis inclinativa 128, 152, 195
vis motiva 195
vis operatoria 195
vita 25, 30, 100, 106, 108, 116, 166, 168, 181
vix 42
volumen 140, 178
vox 100, 108, 168

ydee 115